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A NEW APPROACH TO
ATHLETICS

BY THE SAME AUTHOR

VAULTING AND AGILITY

“authoritative treatise, well planned and thoroughly well illustrated which will prove of great interest to teachers, instructors, and students in training, as well as amateurs.”—*The Schoolmaster*

Fifth Printing

SOME OPINIONS ON

A NEW APPROACH TO ATHLETICS

“Every experienced teacher of physical education will find much food for thought in this volume.”
—*Ling Physical Education Association*

“a thoroughly practical and well-conceived book.”
—*Physical Education and School Hygiene*

A NEW APPROACH TO ATHLETICS

A PRACTICAL GUIDE
FOR TEACHERS, COACHES, AND
"KEEP FIT" LEADERS

BY

STANLEY WILSON

*Assistant Organizer of Physical Education for the L C C
Former Lecturer at the Carnegie Physical Training College, Leeds
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*As an officer of the London County Council, I am required by rule to state
that the Council is in no way responsible for the views expressed in this
book.*

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PREFACE TO THE SECOND EDITION

MANY of my friends and acquaintances have complained of being unable to obtain copies of this book, which, I am pleased to record, seems to have become increasingly popular but which has been unobtainable for some time, owing to wartime difficulties. I have taken the opportunity presented by this reprint to make a few slight improvements, chiefly to the manner in which the material is set out.

A number of teachers who have been able to try out the schemes outlined have reported considerable interest and enthusiasm on the part of their pupils and a general raising of the standard of performance. One school, which won more than half the events at a large district schools sports meeting, attributed its phenomenal success to the systematic training given to the boys by one of the teachers who had attended a course on the work outlined in this book.

I might add that I have since experimented in using other sports as a medium for applying the basic principles of Physical Education. As a result I am led to believe that a really comprehensive, purposeful, and enjoyable scheme embracing most, if not all, branches of Physical Education can be evolved. It is possible that the work in Physical Education in the secondary schools of the future may consist of movements and activities based on our national sports, games, and recreations.

A B B R E V I A T I O N S

::	Working in fours
..	Working in threes
:	Working in twos
.	Working singly
J. Ft.	Jumping Foot
J. Lg.	Jumping Leg
N.-J. Ft.	Non-jumping Foot
N.-J. Lg.	Non-jumping Leg
Lead. Lg.	Leading Leg
Trail. Lg.	Trailing Leg
Run. Posn.	Running Position
Sprint. Posn.	Sprinting Position
Throw. Posn.	Throwing Position
St.	Standing
St. Start for Run.	Standing Start for Running
St. Start for Jump.	Standing Start for Jumping
D.-line	Directional line
C.M.	Check Mark
+	Later

CHAPTER I

~~GENERAL~~ CONSIDERATIONS

ATHLETICS is an excellent form of physical education and one which makes a wide appeal. It is objective in character and provides a ready means of testing ability and skill, as well as the opportunity to display one's physical prowess. It fosters the spirit of emulation and when taken on group lines does much to encourage the team spirit. Yet despite the admirable work of the various Schools Athletic Associations and other voluntary bodies, the sport is not as popular as it might be.

There are many reasons for this. One of the most important is the common impression that athletics is a "display sport" in which only those with a natural gift can be successful. Furthermore, many schools still regard the annual sports, with or without a little incidental training, as the be-all and the end-all of their athletic schemes. Pioneers have been trying for years to discourage this and to attract as many as possible to take part. The careful thought and ingenuity displayed in tempting all to take an active part in the sport must be recorded as praiseworthy. Even so, we are still a long way from the ideal of "Athletics for All."

Unfortunately most schools still treat the sport as being additional to physical education instead of an essential part of it. Much time is given voluntarily, but even this is insufficient to achieve the "all-in" ideal which we set ourselves. Athletics should be given full recognition, for it can make a real contribution to the physical education of the child.

In many of our schools the majority of the pupils receive little, if any, specific teaching in athletics. It is true that

time has been the deciding factor, but even when all can practise, only few receive definite instruction. Yet most events are complicated and call for a high degree of co-ordination and skill. It stands to reason that without adequate tuition few can acquire anything like the correct co-ordination or develop the necessary technique. Then, again, it is unlikely that more than a few will develop a liking for the sport or a true appreciation of it, unless they are given the opportunity of practising the events over a period of time. As in all sports, first attempts can be most discouraging and unless subsequent instruction is forthcoming, the average individual loses heart and interest.

Some teachers still consider that lack of facilities and unfavourable weather conditions are unsurmountable obstacles. Others still feel that the prohibitive cost of apparatus puts the coaching of field events out of the question. Much, however, can be done with the available facilities and with the use of improvised apparatus.

It is suggested that every school should attempt a full and comprehensive scheme of athletics, and that the sport should receive its full share of the time officially devoted to physical education. The scheme should provide all with systematic instruction in a wide variety of events. This would ensure that every boy would receive a certain amount of special training before taking part in competition and at the same time form a useful basis for later work in voluntary classes.

If an annual sports day is desired, then it should be considered as the culminating feature of the scheme. The programme should consist of a selection of events suitable for the various age groups. Lengthy meetings of heats and finals lasting for three or four hours should be avoided. In this connection it is a pleasure to record the disappearance of the old "Victor-Ludorum" system, and in its place the

growth of the sports meeting based on the team system and the award of points.

It is recommended that the athletic season should begin during the last few weeks of the spring term and should continue throughout the summer term. The use of standard tests and the award of simple "Athletic Efficiency Badges" can do much to maintain interest over a long period. Standards chosen should be low enough for the average boy to pass, and boys should not be allowed to attempt several events on the same day. Badges can be awarded to boys who pass certain standards in a group of events, e.g. running, hurdling, throwing and either high or long jumping. In this way early specialization is discounted and all-round performance encouraged.

Inter-group contests, e.g. house, school, district, etc., are other means of sustaining interest. When conducted on a team foundation they appeal to both participants and spectators. The teams chosen should be altered frequently to give as many as possible the thrill of representing the group and the experience of match competition. Thus possible exploitation of star athletes is avoided. In these contests points should then be awarded to each performer according to his position at the finish of the race. In jumps and throwing activities the aggregate distances are recorded.

Other means of stimulating interest are the award of school colours for service in the athletic team, and the introduction of inter-school leagues. Throughout all this competition the school should not allow its efforts to be judged by records made or by contests won. On the contrary, the school's success should be judged by the number of boys who enjoy taking an active part in the sport.

As already suggested a course of training in athletics should be included in the school's physical education programme. It should supplement, or where desirable, take the place of the normal work in the physical training

lessons for a period of at least three weeks at the beginning of the athletic season. Alternatively, arrangements can be made to spread the work over the latter half of the spring term and the first half of the summer term. Another suggestion is to run a series of athletic lessons in the organized games period.

To ensure success, the events require careful teaching and should be analysed and led up to by easy, progressive stages. These stages should be simple enough for all to master, and in an event such as hurdling the pupils should be taught the various parts of the activity before being permitted to participate.

In the coaching of field events, progressive teaching is even more important. Fortunately these activities lend themselves to this treatment. They have a wide appeal and at the same time provide for a different type of athlete, both as to build and muscular efficiency.

It is fully appreciated that success in any branch of sport depends largely on natural ability and suitable physique. Nevertheless, systematic and progressive teaching can produce a high standard of proficiency in the "rank and file." To ensure this, a teacher should see that each stage is mastered before proceeding to the next, and should, when desirable, encourage his pupils to perform each stage as a self-contained activity.

By careful organization and adaptation of teaching methods much can be done to overcome the lack of adequate facilities. Work can be taken in the school hall or gymnasium. Lessons of this nature should run concurrently with practice on the athletic field and should always be followed by work under normal conditions. It is the contention that lessons taken in this way can prove of real value and help considerably to stimulate enthusiasm.

As previously stated, costly apparatus is by no means essential, for the fundamentals of the events can be taught

and well mastered with improvised apparatus, details of which will be found on page 24. The teacher should see that the field events apparatus is in keeping with the ability, age, and size of the pupils, and that progression in apparatus goes hand in hand with the stages of teaching.

The importance of style should be stressed throughout the coaching. Good style appears when the necessary muscular co-ordinations have been established through the continued education of the muscles and muscle groups required for efficient performance, and when the corresponding antagonistic muscles have learnt to relax during the work. The antagonistic muscles invariably hinder the beginner and cause undue fatigue. The aim should be so to master the co-ordinated skills that even during the excitement of competition they continue to reveal themselves as the individual's style.

In conclusion, the teacher is strongly advised to stress the importance of general principles of style, as these do not alter. He need not concern himself unduly with the details of different styles, but rather establish the fundamental co-ordinations which form the basis of all styles.

CHAPTER II

SCHEMES OF WORK

NOTES ON THE SCHEMES

THE various exercises and activities dealt with in the following chapter are grouped in lesson form to facilitate the choice of material. Each scheme is therefore constructed to the following set plan:

PART I

Opening Activities.
Limbering Exercises.
Technique Exercises.

PART II

Class Activities.
Group Practices.
Competitive Activities.
Final Exercise.

There is ample material in each scheme to provide the teacher with several lessons. The number of these lessons must naturally be left to the teacher's discretion and depend on the progress and age of his pupils. How far he desires to introduce athletics into his scheme of physical education is a matter for individual consideration. At the same time it is felt that isolated lessons would prove of little value and that to derive full benefit from the work a minimum of four thirty-minute lessons should be spent on each scheme.

Each lesson should be built to the following set plan and the time spent on each section should run as follows:

(a) <i>The 30-minute lesson</i>	(b) <i>The 40-minute lesson</i>
PART I (15 min.)	PART I (20 min.)
One Opening Activity. (2 min.)	(2 min.)
All four Limbering Exercises.	(4 min.)
(3 min.)	
A selection of Technique Exercises.	(14 min.)
(10 min.)	
PART II (15 min.)	PART II (20 min.)
One Class Activity. (2 min.)	(3 min.)
Group Practices.	}
Competitive Activities.	(12 min.)
Final Exercise. (1 min.)	(16 min.)
	(1 min.)

It will be seen from the above that half the period should be devoted to Part I, that is, the more formal exercises, and the remaining half to Part II, the more informal or recreative activities.

One Opening Activity should be taken in each lesson. These activities are of a lively nature and the teacher should aim at captivating his pupils' interest from the outset. Whilst always being jolly and stimulating they should be taken easily at first and then quickly but gradually speeded up so that the whole body is brought into vigorous action. In this way the circulatory, respiratory and other systems are stimulated and prepared for the more vigorous work to follow. Care should be taken not to prolong the activity.

All the Limbering Exercises should be taken in each lesson. These are largely of a relaxative and suppling nature. They aim at toning up the larger groups of muscles by easy loosening and stretching exercises. These act as a gentle massage and prepare the muscle fibres for vigorous action. Whilst the body should always maintain an upright position,

the muscles of the shoulders and limbs should be kept relaxed throughout. The exercises should be taught to a common time or rhythm set by the teacher, but when well known they should be performed in the individual's own rate. In both cases the exercises should be performed gently at first and then with increasing range (and vigour too in some cases) until complete range of movement is obtained.

A varied selection of Technique Exercises should be included in each lesson, and the number taken should increase until all can be done in the allotted time. Whilst the majority of these exercises have been taken directly from the various athletic events, many have been specially devised. They aim at training, as far as possible within the prescribed limits, the muscle co-ordinations required for the performance of the athletic activities. At the same time they educate and strengthen the muscles and muscle groups required for their correct performance. In addition they teach the isolation of the muscle groups for the particular activity without the hindering effect of the antagonistic muscles. Easy poise, good balance and perfect limb control are desired. To further this the teacher should remember that movement well done looks effortless and graceful.

As previously stated, Part II is the more informal or recreative section of the lesson. It should begin with a class activity, to ensure that all the members of the class are warmed up. Types of organizations are suggested in the schemes, but the teacher should bear in mind that at any one time as many pupils as possible should be actively engaged. The members of the class should be encouraged to help in perfecting their performances by offering friendly criticism to each other.

Then follow the Group Practices which give definite practice in the events proper. Even so, they must be considered preliminary to work taken on the athletic field.

They teach the co-ordination of the body as a whole by fusing into complete movements the various parts practised in Part I and the leading-up stages.

Competitive Activities are included to stimulate the spirit of emulation in each boy and at the same time to cultivate the team spirit. Strict adherence to rules and sportsmanlike behaviour are expected at all times. The teacher, on the other hand, must ensure that all have an equal chance. In relay races, for example, the course should be definite and any one not conforming to the rules liable to immediate disqualification. Whilst bearing in mind that individual rivalry is desirable the teacher should stress the team element.

The final exercise brings the lesson to a satisfactory conclusion. After an exciting race or vigorous group practice it serves the purpose of calming down the pupils and bringing them under the direct control of the teacher. Attention should always be drawn to good carriage of the body.

There are several ways of taking Part II of the lesson so as to provide variety in material, presentation and interest. The following are examples of this general activity section of a lesson (the approximate times which should be spent on each section are stated for guidance purposes only):

The 30-minute lesson

EXAMPLE I

Class Activity. (2 min.)

(3 min.)

Group Practices. (8 min.)

(10 min.)

Either Two activities repeated,
or Four activities

One change only

Competitive Activities. (4 min.)

(6 min.)

Final Exercise. (1 min.)

(1 min.)

The 40-minute lesson

*The 30-minute lesson**The 40-minute lesson***EXAMPLE 2**

Class Activity. (2 min.)	(3 min.)
Group Practices. (12 min.)	(16 min.)
Four activities.	
<i>Change round to each</i>	
Final Exercise. (1 min.)	(1 min.)

EXAMPLE 3

Class Activity. (2 min.)	(3 min.)
Group Practices. (4 min.)	(4 min.)
Four activities.	
<i>No change</i>	
Competitive Activities. (8 min.)	(12 min.)
Final Exercise. (1 min.)	(1 min.)

EXAMPLE 4

Class Activity. (2 min.)	(3 min.)
Competitive Activities and competition work. (12 min.)	(16 min.)
Final Exercise. (1 min.)	(1 min.)

The teacher should vary the organization from lesson to lesson.

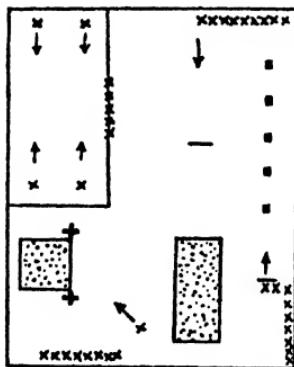
Very careful planning of the relative positions of the group practices selected for a lesson is needed to ensure that full use is made of the available floor space. Alcoves, doorways, and in some schools even corridors can be used for "run-up" purposes. A little sketch of the hall or playground showing the arrangement of the teams and the space and apparatus required for their activity is useful. For an example of such a plan see diagram on p. 23.

The teacher should bear in mind the three main aims of any lesson in physical education, viz.—

(1) *Enjoyment*.—He should try to create a happy atmosphere. Though the nature of the work may be jolly and

interesting, it can be made dull and monotonous by slow and ponderous teaching.

(2) *Movement*.—The lesson should go with a swing. Concise explanations, workmanlike demonstrations and above all thorough preparation of the work will ensure this. It is most important that the lessons should be stimulating and vigorous.



(3) *Purpose*.—The aim of this work is to train the body for athletics and to contribute to the general physical education of the pupil. The teacher should therefore *insist* on correct performance, and *persist* until he obtains it.

APPARATUS

The following apparatus is suggested if all the events provided for in the schemes are to be taken:

Gymnastic mats.

Jumping stands and ropes.

Bamboo canes, 5 feet long and about $\frac{1}{2}$ inch in diameter.

Bamboo canes, 7-8 feet long and about $\frac{3}{4}$ inch in diameter.

Bamboo poles, about 12 feet long and about $1\frac{1}{2}$ inches in diameter. These should be female bamboos.

Laths, about 5 feet long. These can easily be graduated in feet and inches and used for measuring purposes and improvised jumping stands. (The lath is held in a vertical position and the rope at the required height.)

Home-made detachable hurdles, 2 feet 6 inches, 3 feet, and 3 feet 6 inches.

Skipping ropes (lengths of rope knotted at the ends). Ropes, about 8 yards in length.

Tennis balls.

Footballs (size 4).

Home-made discuses with and without straps.

Home-made medicine balls of different weights.

Home-made batons.

A supply of official apparatus. Practice discuses, bamboo shafted javelins, and iron shots are quite good enough.

NOTES ON THE IMPROVISATION AND THE CONSTRUCTION OF APPARATUS

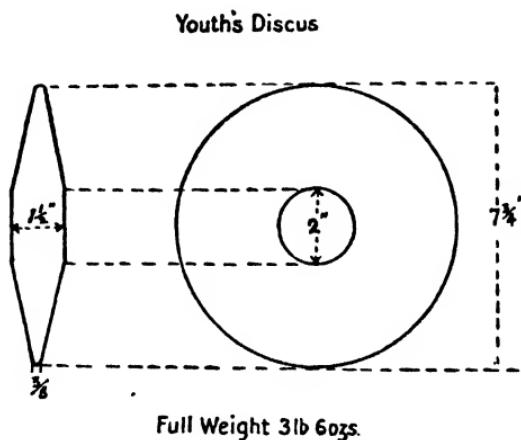
1. *Detachable Hurdles*

Two types can be made, one for indoors and for use in the playground, and the other for use on the playing field. The uprights of the first type are fixed in a small wooden base and in the second kind they are tapered so that they can be easily pushed into the ground. The tops of both kinds should have V-shaped slots in them to allow for the cross-piece. The uprights are placed about five feet apart and small bamboo canes laid across them to form the cross-bars.

2. *Practice Discuses*

These should be constructed in very hard wood and then oiled to keep out the wet. If made of beechwood the

youth's size works out about 1 lb. 2 oz., but it can be made heavier by adding lead to its centre. It is suggested that these are constructed by boys as an exercise in the use of the school lathe. Much valuable work can be done with these home-made discs and for early practice purposes out of doors they serve as effective substitutes for the



manufactured articles. Straps to hold them in position can easily be fastened to one side of them (see illustration).

3. *Medicine Balls*

These can be made from discarded football cases, but it is better to use new cases as they last much longer. Size 4 balls should be used for the lighter medicine balls and size 5 for the heavier. Various material can be used for stuffing the ball, but it has been found best to use a piece of iron as the centre core and to wrap it with cloth. This is then forced through the opening and then carefully stuffed with cotton waste or rag until the ball is quite firm.

4. *Outdoor Shot*

Although iron shots can be obtained at reasonably low prices, suitable practice shots can be found in abundance on the seashore. The large rounded pebbles found on the beach can be weighed and graded to suit everyone.

SCHEME I

PART I

OPENING ACTIVITIES

1. (*Hands Clasped in Front of Abdomen*) Running Circular Maze.
2. Easy running, on signal change to running on the spot with high Knee lifting to beat the Knees on the Hands. (To 10 or more counts.)

LIMBERING EXERCISES

1. ARM.—(*Arms Relaxed*) Shoulder, Elbow, Wrist, and Finger shaking.
2. TRUNK.—(*Astride*) Relaxed Trunk bending sideways, several times to each side.
3. TRUNK.—(*St.*) Relaxed Trunk bending downward with presses.
4. LEG.—(*Knees Full Bend Together, Hands on Floor In Front*) Knee springing. Finish with hopping with relaxed Leg shaking.

TECHNIQUE EXERCISES

1. RUNNING.—(*Heels Raised, Balls of Feet*) Lifting on to Tip-Toes. + On to alternate Tip-Toes.
+ (*Hands Clasped in Front of Abdomen*) Easy running on the spot. (Stage 1.)
2. HURDLES.—(*St., Lead. Lg. Backward*) Swing the Lead. Lg. forward and 3 walking steps on the spot.
+ with high Knee lifting. (Stage 1.)
3. WESTERN ROLL.—(*St.*) Short run and hop off J. Lg.
+ over a cane (:). (Stage 1.)
4. RUNNING.—(*Arms Run. Posn.*) Easy Arm action.
+ with running on the spot. + progressing forward. (Stage 2.)

5. STANDING JUMPS.—(*St., Feet Slightly Apart*) Take-off action of the Feet, viz. rocking forwards and backwards. + with a little spring into the air. (Stage 1.)
 (*St., Feet Slightly Apart*) Complete take-off action, viz. Heel raising with Arm raising forward-upward. Trunk leaning forward with Knee bending and Arm swinging forward-downward-backward; upward jump with Arm swinging vigorously forward-upward. + rhythmically and continuously to 4 counts. (Stage 2.)

6. THROWING AND PUTTING.—(*St., Throw. Posn. Hands Clasped Behind*) Putting movement using Legs and Trunk only. + rhythmically. (Stage 1.)

7. JAVELIN.—(*St., Throw. Posn., Throw. Arm Backward*) Throwing movement (:), + (.) and + continuously in slow time. (Stage 2.)

PART II

CLASS ACTIVITIES

1. (*St., Start for Jump*) Long Hops. + Long Strides. + Long Hop and Stride. (Stage 1.) + running. (Stage 2.)
2. Running High Hop over rope or cane. (Waves of teams.)

GROUP PRACTICES

1. Running High Hop, approaching rope at right angles. (Stage 2.)
2. Overhead throw with medicine ball as in Association Football.
3. (*St. Start for Jump*) 2 or 3 Hops with markings.
4. Individual skipping. Various forms.

5. (*St. Throw. Posn., Throw. Arm Backward Holding Tennis Ball*) Throwing practice at wall. (Stage 2.)
6. (*St. Start for Jump*) Hop, Step, Hop and Step.

COMPETITIVE ACTIVITIES

1. Scoring Runs. Individually. In teams across.
2. Relay Races. Various.
3. Lame Duck Race. Race on All Fours.

FINAL EXERCISE

(Heels Raised, Ball of Foot) Lifting on to Tip-Toes.

NOTES

(St. Start for Jump.) 2 or 3 Hops with markings

The performer holds a piece of chalk in one hand and hops forward and lands without moving the foot. He then bends down and marks the floor in front of his toes. He hops forward again and repeats the same. He then reaches forward, marks the floor as far forward as possible and stands up on both feet without having moved the foot on which he was standing. The total distance is recorded.

Scoring Runs

(a) Individually

(Class in One Rank, St. Start for Run, Toeing Line) On the signal all race across and touch the floor with their hand beyond the far line. They then race back again and touch the floor beyond the starting line and so on a given number of times. The first one to take up the Crouch position behind the starting line is the winner.

(b) In Teams of Four

(Class in Open Order with Hands Joined Across) On the signal all move sideways in the direction stated so as to allow the

outside pupil to touch beyond the line on his side of the hall. All then move quickly in the opposite direction to enable the other outside player to touch beyond his side line and so on. The first team of four back into open order in the Crouch position is the winner.

Lame Duck Race

All take up the position shown in the illustration and toeing the starting line. On the signal they race forward with a series of hops. Short distances only.

Lame Duck.



SCHEME 2

PART I

OPENING ACTIVITIES

1. Running gradually increasing in speed and following a leader round skittles.
2. (*Lead. Lg. Backward*) Running with a bound on every 4th count.

LIMBERING EXERCISES

1. ARM.—(*Arms Relaxed*) One Arm circling several times then with increasing speed. Finish with loose Arm shaking.
2. TRUNK.—(*Astride*) Relaxed Trunk dropping downward to beat both Hands on the floor outside of one Ankle several times and stretch up. Repeat to the other Ankle.
3. TRUNK.—(*Knees Full Bend Together, Hands on Floor In Front*) Knee stretching with rhythmic Trunk bending downward. (*Take the Hands off as the stretch is made.*)
4. LEG.—Hopping on the spot with free relaxed Leg shaking.

TECHNIQUE EXERCISES

1. RUNNING.—(*Heels Raised, Balls of Feet, Arms Run. Posn.*) Lean forward and run easily. (Stage 3.)
2. HURDLES.—(*Side St., One Arm Sideways Support at Wall or Shoulder Support (:), Grasping Shin of Trail. Lg.*) Leg lifting. + Knee circling forward. (Stage 2.)
3. WESTERN ROLL.—(*St. J. Lg. Backward*) Step forward on to the J. Ft. with the N.-J. Lg. swinging

sideways in the take-off action. + with a little spring into the air. (Stage 4.)

4. **RUNNING.**—(*Arms Sprint. Posn.*) Piston Arm action. (Stage 1.)

5. **STANDING JUMPS.**—(*St. Feet Slightly Apart*) Complete take-off action. (Stage 2.) (St. Feet Slightly Apart) Take-off action with a high jump upward into the air, lifting the Knees well up on to the Chest. + with movement forward. (Stage 1 of High Jump Forward.)

6. **SHOT.**—(*St. Throw. Posn., Elbows Level with Chin, Fingers Interlaced*) Putting movement. + with right Arm pushing forward. (Stage 2.)

7. **JAVELIN.**—(*St. Throw. Posn., Throw Arm Backward, Holding Cane or Spear*) Throwing movement (:). + (.). (Stage 3.)

8. **POLE VAULT.**—(*St. Facing Wall, J. Lg. Backward, Holding Pole as for Run-up*) One step forward on to J. Ft. planting the pole against the base of the wall. At the same time the Knee of the N.-J. Lg. is lifted. + with a little spring. (Stage 1.)

PART II

CLASS ACTIVITIES

1. Standing High Jump Forward over a cane (:).
2. (*St. Start for Jump.*) Hop, Step, and Jump. In class formation: + in waves of teams across. + Hop, Step, and High Jump. (Stage 3.)

GROUP PRACTICES

1. (*St. Start for Jump*) Hop, Step, and Jump. (In given ratio.) (Mats.) (Stage 4.)
2. Overhead throw backwards with the medicine ball.

3. Standing High Jump Forward over a rope. + to beat standard. (Stage 2.)
4. Standing put with medicine ball. (Stage 3.)
5. Potato Race against watch. Time the whole team.
*(Wood cubes at 4, 6, 8, 10 yards from starting line.
The first runner picks up the blocks and the next puts them down again and so on.)*
6. (St. Arms Upward Grasping End of Pole, Helper Grasping Lower Third of Pole (:)). Performer practises the take-off action and the pendulum swing of the Body. + over a low rope. (Mats.) (Stage 2.)

COMPETITIVE ACTIVITIES

1. Obstacle Relay.
2. Crow Hop Race. Stiff Knee Race.
3. Stick Jumping Relay. (See notes on Composite Relay Scheme 3.)

FINAL EXERCISE.

(Heels Raised, Balls of Feet) Raising on to alternate Tip-Toes.

SCHEME 3

PART I

OPENING ACTIVITIES

1. Team Tag.
2. Individual skipping. Various forms.

LIMBERING EXERCISES

1. ARM. (*Arms Relaxed*) Arm swinging forward-side-ways with 2 presses in position.
2. TRUNK.—(*Astride*) Relaxed Trunk bending from side to side.
3. TRUNK.—(*One Leg Backward, Arms Midway-Downward Relaxed*) Leg swinging forward and backward with Trunk bending backward. (*Emphasize the backward swing.*)
4. LEG.—(*Kneel St. Ankle Stretched*) Knee springing.

TECHNIQUE EXERCISES

1. RUNNING.—(*Heels Raised, Balls of Feet, Arms Run. Posn.*) Lean forward and run easily keeping strides on each side of a straight line (4, 6, or 8 parallel lines). (Stage 5.)
2. HURDLES.—(*St., Arms Sprint. Posn.*) Arm action. + with Body dip. (Stage 3.)
3. RUNNING.—(*Heels Raised, Balls of Feet, Arms Sprint. Posn.*) Easy running on the spot (or freely) on signal running on the spot with exaggerated Knee lifting. (Stage 2.)
4. HURDLES.—(*St., Trail Lg. Backward, One Arm Sideways Support at Wall, or Shoulder Support (:)*) Grasp the Shin and lift the Knee sideways as high as possible; then move the Leg forward-upward and

- 1 stretch it to the Foot Forward Posn. Return to the starting posn. and repeat. + perform without holding the Shin. (Stage 5.)
- 5. LONG JUMP.—(St., J. Ft. Raised Forward) Step on to J. Ft. and swing the rear Leg forward with the Knee up, and spring up into the air. (Stage 1.)
- 6. JAVELIN.—(St., Left Foot Forward Toeing the Line (i.e. C.M.), Hands Clasped Behind), Walk steps of the transitional stage and throw. (Along D-lines to 5 counts.) + at a slow run. (Stage 4.)
- 7. SHOT.—(St., Sideways Along D-line, Left Foot Sideways on Toe, Hands Clasped Behind) Leg movement across the circle. + with Arm movements. + with reverse. (Stage 4.)
- 8. DISCUS.—(St., Throw. Posn.) Throwing movement with Arm movement. + rhythmically. + with discus fastened on to Hand. (Stage 2.)

PART II

CLASS ACTIVITIES

- 1. Standing High Jump Sideways over cane (:). (Stage 2.) (Introduce Stage 1 first, then pass quickly to Stage 2.)
- 2. Running Hop, Step, and High Jump over rope. (Waves of 4. Mats.)

GROUP PRACTICES

- 1. Running High Hop approaching rope at an angle of 45 degrees. (Approach from the same side as the J. Lg. (Jumping Stands and Mats.) (Stage 3.)
- 2. Standing Put with the medicine ball with reverse. (Stage 3.)
- 3. Standing High Jump Sideways over rope. + to beat standard. (Stage 2.)

4. (St., Throw. Posn.) Arm movement with the discus strapped to the Hand. (Stage 2.) + practice delivery of discus using tenniquoits. (Stage 3.)
5. Running High Jump Forward to land on both Feet. (*Approach at right angles to the rope.*)
6. (St., J. Lg. Backward, Arms Upward Grasping Rope) One step forward on to J. Ft., take off and swing forward and upward. Swing back again and return to the starting place. (Climbing Ropes.) (Stage 3.)

COMPETITIVE ACTIVITIES

1. Lame Dog Race.
2. Whirligig. Boat Race.
3. Composite Relay: Lifting Race—Stick Jumping Relay
—Straddle Relay.

FINAL EXERCISE

Relaxed Trunk dropping downward and unrolling to 4 counts.

NOTES

Lame Dog Race

All take up the position illustrated, with their hands behind the starting line. On the signal they race forward, keeping the raised leg off the floor.

Lame Dog.



Whirligig

The teams should be in Open Order and well separated. On the signal the leader of each team turns left and races down and round the end pupil, up the right side of his team and places his hands on the hips of the second pupil in the team. Together and with the second pupil leading they race down the left side of the team, round the end and up again to fix on to the next and so on. When the last player is brought in he leads his team forward to a fixed mark and all take up the Knees Full Bend position.

Boat Race

(*Teams in Close File Formation, Knees Full Bend, Hands on Shoulders of Pupil in Front*) The leader of each team stands facing his team, toeing the starting line, and grasping the hands of first pupil. On the signal the teams move forward with small jumps. The first boat crossing the line a short distance away wins.

Composite Relay

A football (and a tenniquoit to keep it in position), a hoop, and a short stick should be placed on the floor well in front of each team. Teams in Horizontal Sitting Position.) The relay begins with Lifting Race. When the leader is lifted on to his feet he runs forward, picks up the stick and races down the right side of his team, each pupil jumping the stick in turn. (*The stick should be held parallel to the floor.*) The race continues and when the last pupil returns the stick to its original place he picks up the football, takes it to the front of his line and turning round throws it under his legs and those of his team. The last pupil picks it up, straddles over the backs of his team, runs forward and bounces the ball

in the hoop, and returns to throw the ball under his legs, etc. This bouncing the ball in the hoop allows the other players time to get on to their feet and to move back one place. The race finishes when the leader puts the ball on the tenniquoit and all stand.

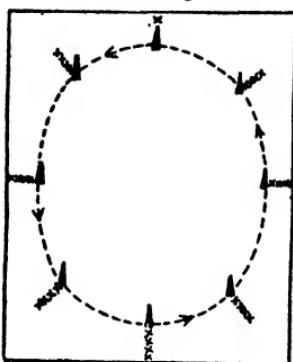
SCHEME 4

PART I

OPENING ACTIVITIES

1. All in walking race—"Round the Course." (*Each time a skittle is passed a point is scored.*)

All in Walking Race.



2. (*Circle Formation, About 10 to 20 in each Circle, Facing Inwards, Arms Interlaced*) Easy running on the spot change to running with high Knee raising, then with progressing sideways. (*Lean back a little.*)

LIMBERING EXERCISES

1. ARM.—(*Arms Relaxed*) Double Arm circling; then with increasing speed and finish with Arm shaking.
2. TRUNK.—(*Astride, Arms Forward, Hands Touching*) Trunk turning with one Arm swinging sideways. (*About 3 times to each side, then drop the Arms and repeat.*)

3. TRUNK.—(*Astride*) Relaxed Trunk dropping downward to beat the floor forward, between and outside the Feet.
4. LEG.—Alternate Knee lifting and pressing to the Shoulder 3 times. (*Count: Go! lift, 2, 3, 4; change, 1, 2, 3, 4, etc.*) (*Grasp the Ankle with one Hand and below the Knee with the other.*)

TECHNIQUE EXERCISES

1. RUNNING.—Sprint starts. (*See Stage 6 a, b, and c.*)
2. HURDLES.—(*St., Lead. Lg. Backward, Arms Sprint. Posn.*) Lead. Lg. action and 3 walking steps on the spot with Arm action and Body dip. + moving forward. (*Stage 6.*)
3. WESTERN ROLL.—(*St., J. Lg. Backward*) Step obliquely forward on to the J. Ft. and spring off, swinging the N.-J. Lg. sideways, and bringing up the J. Lg. to beat the Ankle against the Knee of N.-J. Lg. Land on the J. Ft., with the other Leg in the air, facing the take-off. (*Stage 5.*)
4. RUNNING.—(*Heels Raised, Balls of Feet, Supported at Wall or Grasping Chair Back*) Alternate Knee pressing forward with lifting on to the Tip-Toes + at running speed. (*Stage 3.*)
5. LONG JUMP.—(*Across Sitting, Alternately on Opposite Sides of Bench, Knees Raised, Arms Forward-Upward*) Standing up by stretching the Knees and swinging the Arms forward-downward. (*Stage 3.*) (*St. Start for Run.*) Run and take-off practice. (*Mats.*) (*Stage 4.*)
6. JAVELIN.—(*St., Short Astride, Throw. Hand Level with Head*) The Arm movement of the throw. Count 1-5. + with canes or spears. (*Stage 5.*)

(St., *Left Foot Forward Toeing C.M., Throw. Hand Level with Head*) Arm and Leg movement combined. + with canes or javelins. At walking speed and then at running speed. (Stage 6.)

7. **POLE VAULT.**—(*Horizontal Sitting, Knees Raise, Arms Upward Grasping Pole*) Standing up and turning to face the pole by first pulling and then pushing on it. (Stage 4 b; see also Stages a and c.)

PART II

CLASS ACTIVITIES

1. Teach Stage 10 of Hurdling and then practise Stage 4. Follow up with (*Lead. Lg. Backward*) a very small bound forward and then 3 strides and hurdle a low cane (: :). (Stage 11.)
2. Standing Long Jump. (*Work across in waves of teams.*) (Stage 1.) + try to get a good "hang in the air" and a quick Knee lift (.) or (:). (Stage 2.)

GROUP PRACTICES

1. Running Western Roll. Try to get a good lie out. Mat essential. (*Jumping Stands and Rope.*) (Stage 7.)
2. Potato Race against watch. Time the whole team. (*Wood cubes at 4, 6, 8, 10, and 12 yards from starting line.*) (See Scheme 2, Group Practice 5.)
3. (St. *Start for Run.*) Running Hop, Step, and Jump. + to beat standard. (Mat.) (Stage 5.)
4. Putting with a medicine ball (or indoor shot) from a 6-feet or 7-feet diameter circle. (Stage 5.)
5. Standing Long Jump. + to beat standard. (Stage 3.)

6. (St., Throw. Posn., Throw. Arm Backward, Palm Uppermost, Holding Football.) Throwing practice at high wall. (Stage 2.)

COMPETITIVE ACTIVITIES

1. Jumping the Backs Team Race. (*Teams take up the Horizontal Kneeling position and the end pupil skip-jumps with rebound over the backs of the others, the remainder following on after him. Warn the pupils not to try and go too fast.*)
2. Zero Long Jump. (*See below.*)
3. Obstacle Relay Race.

FINAL EXERCISE

Walking on the spot with slight Knee raising and Ankle stretching.

NOTES

Zero Long Jump

This is a team activity where teams of 2, 3, or 4, or more a side can take part. For example, red team is competing against blue. The first red player toes the line (i.e. zero mark) and jumps forward. The place where he lands is marked. Then the first blue toes this mark and jumps back towards the zero line. His landing is also marked. The next red performs his jump from the line where the blue landed and so it goes on until the last player in blue has his turn. If he finishes on the far side of zero then his is the winning team. Hop, step, and jump may be taken in the same way.

SCHEME 5

PART I

OPENING ACTIVITIES

1. All-in Tag.
2. Running Circular Numbers. (See Notes.)

LIMBERING EXERCISES

1. ARM.—(*Arms Relaxed*) Arm swinging forward-backward-forward-upward and down, then forward-sideways-forward and down.
2. TRUNK.—(*Astride*) Relaxed Trunk rolling twice in each direction.
3. TRUNK.—(*Knees Full Bend Together, Hands on Floor in Front*) Knee springing to 4 counts and Knee stretching with rhythmic Trunk bending downward to 4 counts.
4. LEG.—(*Arms Relaxed*) Hop-kick step (*Keep the whole body relaxed and let the Arms dangle.*)

TECHNIQUE EXERCISES

1. RUNNING.—Sprint Starts. (See Stage 6 a, b, and c.)
2. HURDLES.—(*Horizontal Sitting*) Change to Hurdle Sitting Position. (Stage 7.)
(*St., Lead. Lg. Backward, Arms Sprint. Posn.*)
Running with Lead. Lg. action, Arm action and Body dip. (Stage 8.)

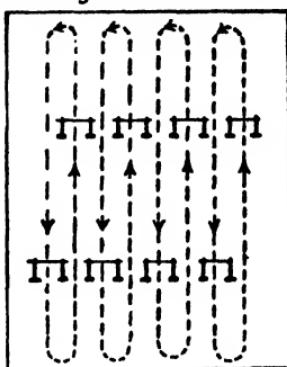
3. WESTERN ROLL.—(*St., N.-J. Lg. Sideways and Slightly Forward, Foot held by Partner (:)*) Jump off the J. Lg. and bring it up with bent Knee against the other Leg, turn and land on the J. Lg. + land on the J. Lg. in a Semi-Front Support position with the N.-J. Lg. raised. + with Arm action. (Stage 6.)
4. RUNNING.—(*Heels Raised, Balls of Feet, Supported at Wall or Grasping Chair Back*) Single Knee lifting, then alternate Knee lifting, then + running action. (Stage 3.)
5. LONG JUMP.—(*St., J. Lg. Backward*) Step forward on to J. Ft. and jump forward, lifting first the rear Knee and then the Knee of the J. Lg. to beat them together on the Chest, and with opposite Arm punching forward and upward. (Stage 2.)
6. JAVELIN.—(*St., Left Foot on C.M., Throw. Hand Level with Head, Grasping Partner's Fingers of the Left Hand*) Walk steps and "throw." + at slow running speed. (Stage 7b.)
7. DISCUS.—(*St., Left Foot Sideways Along D-line, Hands Clasped Behind*) Steps of the turn (3 counts). + rhythmically. + with discus fastened to the Hand. (Stage 4.)
8. POLE VAULT.—(*Standing in Ranks Facing Wall*) Carriage of the pole and practice of planting it against the base of the wall, followed by the take-off action and a little spring. (Stage 5.)

PART II

CLASS ACTIVITIES

1. Hurdling over a series of single low hurdles

Hurdling. Series of Hurdles.



2. Running Long Jump. (Mats.) (Stage 5.) Running Long and High Jump over a rope. (Waves of 4, Mats.) (Stage 6.)

GROUP PRACTICES

1. (St., Throw. Posn., Arm Backward, Palm Uppermost holding Light Medicine Ball) Throwing practice at a high wall. (Stage 2.)
2. Standing 2 or 3 consecutive Long Jumps. (See Notes.)
3. Hurdling one hurdle. (Height: men, 3 feet or 3 feet 6 inches; boys, 2 feet 6 inches or 3 feet.) (Stage 12.)
4. (St. Start for Run.) Running Long Jump to beat standard. (Use C.M.) (Mats.)

5. Running Western Roll. (Jumping Stands and Mats.) (Stage 7.)
6. (St., N.-J. Lg. Backward, Arms Upward Grasping Rope) Two steps forward and take-off followed by the body swing. The Arm pull and turn towards the rope is also made before the landing takes place. + add the Arm push. (Climbing Ropes and Mats.) (Stage 6.)

COMPETITIVE ACTIVITIES

1. Shuttle Relay. (St. Start for Run.) Runners must touch the shoulder of the next in his team.
2. (Arms Sideways Interlaced) (:) or (..). Hopping Race.
3. Potato Race. (Four teams competing against each other.)

FINAL EXERCISE

Free walking on signal stop in the standing position. Relaxed Trunk dropping downward and unrolling to 4 counts.

NOTES

Running Circular Numbers

(Open Order, Teams Facing Left, Hands Clasped in Front for Running) Number the teams across (e.g. Reds 1, Blues 2, Greens 3, Yellows 4). The leader of red team leads the class and in the order 1, 2, 3, 4, 1, 2, etc. all jog trot round the hall. The teacher then calls out a number and those pupils have to race round the outside of the moving circle, and overtaking the other numbers, return to their places in the circle. Make full use of the space available.

Two or Three Consecutive Long Jumps

These are a series of long jumps taken from a standing start. There must not be a pause between the landing of one jump and the take-off of the next. The last landing-place is recorded.

SCHEME 6

PART I

OPENING ACTIVITIES

1. Easy counter running; line up in close formation.
Boat Race.
2. Free and Caught. (*Skip jumping on the spot when "caught."*)

LIMBERING EXERCISES

1. ARM.—(*Arms Relaxed*) Shoulder, Elbow, Wrist, and Finger shaking.
2. TRUNK.—(*Astride*) Trunk bending sideways with presses.
3. TRUNK.—(*St.*) Relaxed Trunk bending downward with presses to reach forward and backward alternately.
4. LEG.—(*Arms Relaxed*) Arm swinging forward with Heel raising, then Knee full bending together and Knee springing 3 times, with pendulum swings of the Arms; finish in the standing position. (Count: Go! lift, spring, spring, spring, up; lift, swing, swing, swing, up, etc.)

TECHNIQUE EXERCISES

1. RUNNING.—Counter running. "Pattering" in one direction and easy running in the other. (Stage 4.)
2. HURDLES.—(*St., Lead. Lg. Backward*) Step forward with the Lead. Lg. with Arm action and Body dip, immediately followed by Trail. Lg. and Arm action. (Stage 9.)

3. WESTERN ROLL.—(*St., J. Lg. Backward*) Step obliquely forward on to J. Ft. and spring up to perform the Western Roll movement and land in the Semi-Front Support position with the N.-J. Lg. raised. (*See Stages 5 and 6.*)
(*Back Lying*) Practice of the "Lie-out" position. (Stage 8.)
4. RUNNING.—Baton changing. (Waves of teams across, then + waves of 4 up and down hall.)
5. DISCUS.—(*St., Left Foot Sideways along D.-line*) Preliminary Arm swings. + with complete turn and with Arm movement. + with discus fastened to the Hand. (Stage 5.)
6. JAVELIN.—(*St., Throw. Hand Level with Head, Grasping Cane or Spear*) Stepping off with the left Foot, running with the overhead carriage of the spear. (Stage 8.)
(*St., Left Foot Forward Toeing C.M., Throw. Hand Level with Head*) Arm and Leg movement combined. + with canes or javelins. At walking speed and then at running speed. (Stage 6.)

PART II

CLASS ACTIVITIES

1. Skipping. Various forms. (Competition: first to skip a given number of times.)
2. Sprint Starts in waves of teams. (Stage 6 a, b, and c.)

GROUP PRACTICES

1. Crouch Start and hurdle one hurdle. (Stage 13.)
2. Running Western Roll. (Jumping Stands and Mat.) (Stage 7.)

3. (St., *Left Foot Sideways along D-line*) Preliminary Arm , swings, turn, and "throw." (Discus fastened to Hand.) (Circle for men 8 feet diameter, for boys 7 feet diameter.) (Stage 5.) + with a tenniquoit to practise delivery. (Stage 3.)
4. (St. *Start for Run.*) Running High and Long Jump over a rope. (Height of rope fixed and distance measured.) (Jumping Stands and Mat.) (Stage 6.)
5. Putting with the medicine ball (or indoor shot) from a 6-feet or 7-feet diameter circle. (To beat standard.) (Stages 5 and 6.)
6. Running vault over a rope. (Jumping Stands and Mat.) (Stage 7.)

COMPETITIVE ACTIVITIES

1. Relay Race with Baton Changing. (See Notes.)
2. Zero Standing Hop, Step, and Jump. (See Notes on page 42.)
3. Composite Relay: Lifting Race—Stick Jumping Relay —Straddle Relay. (See Notes on page 57.)

FINAL EXERCISE

(*Heels Raised, Balls of Feet*) Lifting on to alternate Tip-Toes.

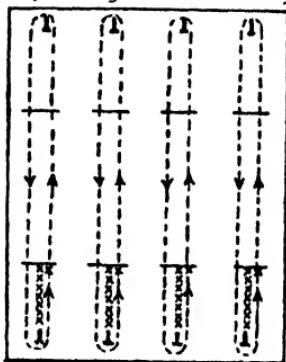
NOTES

Relay Racing with Baton Changing

This can be taken either up and down the hall or playground in the form of a shuttle relay, or where space

permits, in a large circle. When taken indoors the activity may be a little cramped, but the main principles such as the correct method of passing the baton whilst at running speed can be taught and the pupils' efficiency to do so put to the test of competition. The teams line up in close formation at one end of the hall or playground and on the signal the first runner races forward round a post, e.g. hurdle upright, and then down to the end of his team,

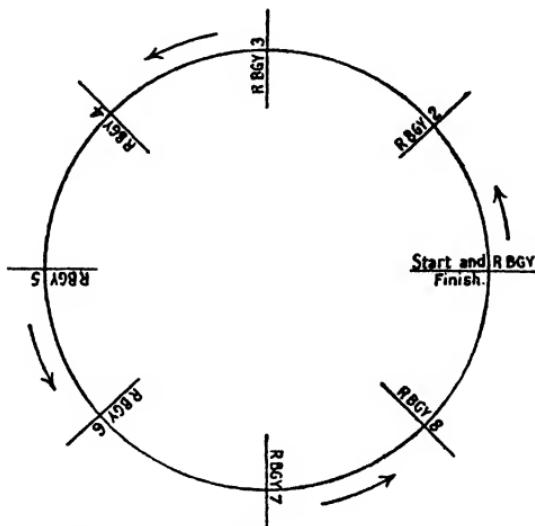
Relay Racing with Baton Changing



round another post and then forward again. On his way forward for the second time he passes the baton to the next runner who has run forward alongside of him. The first runner then takes up his place on the far side of the hall whilst the second runner continues with the race. He too runs forward, back, and then forward again and passes the baton to the next and so on. The teams line up on the far side of the hall and the last runner in each team completes his course and touches the extended hand of the first runner.

When taken in a large circle the runners line up round the "track" as in the diagram, and each runner races round

the circle and on to the next runner to whom he gives the baton. In this way everyone in each team has a turn.



Relay Racing with Baton Changing.

In both cases the baton should be passed on to the next runner as follows:—

The approaching runner holding the baton in his left hand puts it into the right hand of the waiting runner, who immediately transfers it to his left. The waiting runner should start running well before the approaching runner gets up to him. In competition proper, the exchange must be carried out in a distance of 20 yards i.e. 10 yards on each side of the starting line.

CHAPTER III

PROGRESSIVE STAGES OF TEACHING

RUNNING

GENERAL PRINCIPLES

1. *Run straight.*—The shortest distance is a straight line.
2. *Keep near the ground.*—Effort should be directed in a forward and not an upward direction. Discourage bounding.
3. *Body balance and control.*—A well-poised body with good limb control is necessary. The head should be in line with the body. Keep the shoulders square to the front and do not rock from side to side.
4. *Body angle.*—Increases with speed. Too upright a body means lack of forward momentum, too sharp an angle causes a stumbling action.
5. *Leg action.*—Length of stride and rapidity of action are most important. Both are determined by the speed and the distance of the race. Except in distance running, the heel should not touch the ground. Run on the ball of the foot and use the ankles by pushing off on to the tip-toes. The knee should be lifted up in front with very little kick up behind (very common fault). The body weight should be carried well forward in front of the forward knee, and there should be a forceful drive with the back leg. The legs should move like pistons and not lift sideways.
6. *Arm action.*—Should help and not detract from the movement. Keep the shoulders loose. Emphasis should be laid on the downward, backward pull.

PROGRESSIVE STAGES

1. (*Heels Raised, Balls of Feet*) Lifting on to Tip-Toes. + on to Alternate Tip-Toes + (*Hands Clasped in Front of Abdomen*) Easy running on the spot.
2. (*Arms Run. Posn.*) Easy Arm action. + with running on spot. + progressing forward.

Running Stage 3.



3. (*Heels Raised, Balls of Feet, Arms Run. Posn.*) Lean forward and run easily.
4. (*Heels Raised, Balls of Feet, Hands in Front of Hips, Palms Downward*) Running on spot with high Knee lifting to beat the Knees on to the Hands.
5. Ditto Stage 3, keeping strides on each side of a straight line. (4, 6, or 8 parallel lines).

NOTES

Lift up on to the front edge of the plimsoll. Good springy movements. When lifting on to alternate tip-toes the knees should move directly forward.

Keep a fixed angle of 75° at the elbow and the fingers lightly clenched. The hands move forward to a point in front of the chest and are drawn back to the line of the hips. Keep relaxed.

The whole body should lean forward and maintain a graceful line from the heel to the back of the head.

The knees should be lifted up to the hands and not the hands moved down to knees. The hands should be 2 or 3 inches apart.

The smallest divergence from the straight line should be checked. Extra inches covered mount up in the course of a race, and may even amount to yards handicap. Pupils should watch each other carefully and offer friendly criticism.

SPRINTING

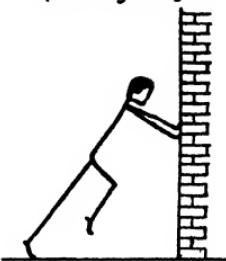
PROGRESSIVE STAGES

1. (*Arms Sprint. Posn.*) Piston Arm Action.

Sprinting Stage 2.



Sprinting Stage 3.



2. (*Heels Raised, Balls of Feet, Arms Sprint. Posn.*) Easy running on spot (or freely) on signal running on spot with exaggerated Knee lifting.
3. (*Heels Raised, Balls of Feet, Supported at Wall or Grasping Chair Back*) Introduce as Alternate Knee pressing forward with lifting on to the Tip-Toes. + at running speed. + Single Knee lifting. Then + alternate Knee lifting, and + running action.
4. Counter running. "Pattering" in one direction and easy running in the other.
5. (*Heels Raised, Arms Sprint. Posn.*) Lean forward to sprinting angle and sprint forward.
6. *Sprint Starts:*
 - (a) "Get to your Marks!"

NOTES

Angle of 90° at the elbows with fingers clenched. Keep the elbows close to the body with the forearms pointing directly forward. Direct the arms in a piston-like movement and emphasize the backward pull. The hands should not rise in front higher than the shoulders and should not be carried back further than the line of the hips.

Encourage lightness and a good knee lift with a vigorous arm action. Take in short spells at first, say to 10 counts, later rising to 20 counts or more.

Sprint angle of about 60° - 70° . Maintain a graceful line from heel to head. Check the tendency to push out the seat.

"Pattering" is quick running with shortened strides to encourage rapidity of action. The knees should be lifted high.

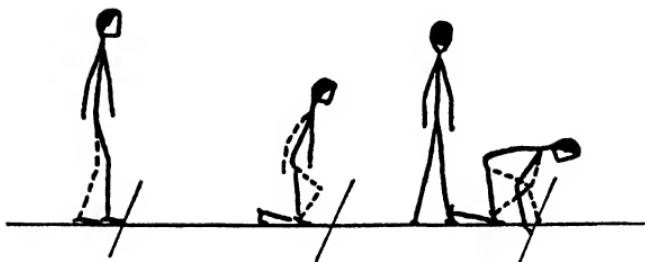
Again the whole body should lean forward and maintain a graceful line. The pupil should start the leg action just before he feels he is going to stumble. Watch the position of the head.

Toe the line with one foot (usually N.-J. Ft.). Place the toes of other foot to the heel of this N.-J. Ft. Take away the forward foot and ~~kneel down~~ with the knee close to

(Continued on page 59)

PROGRESSIVE STAGES

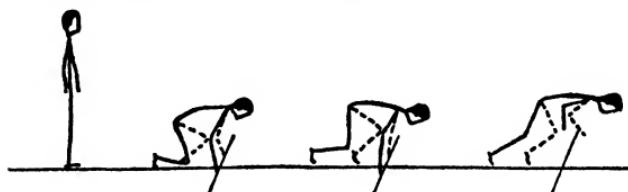
"Get to your Marks!"



(b) "Set!"

(c) "Go!" or "Pistol!"

(a) "Get to your Marks!" (b) "Set!" (c) "Go!"



NOTES

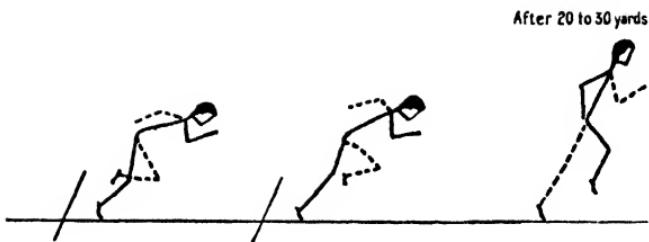
and opposite the instep of the J.-Ft. Tuck the toes under the back foot. There should be sufficient space between the knee and the instep to allow the passage of the fingers. Place the fingers to the line. The arms should be straight and shoulder-width apart, with the weight mostly on the knee and the hands. Keep the head up, and maintain a position of ease. Later, the pupils should stand well back from the starting line, and on the signal, walk forward and quickly take up their positions.

The knee is lifted about 6 inches off the ground (shin approximately parallel to the ground). The body weight is now transferred over the forward foot and hands. The eyes should look forward to a point about a foot-length in front of the line, which is where the first step is made.

The body should be quite steady.

A push-off is made with the back leg, and the foot is carried forward to a point about a foot-length in front of the line. At the same time a gentle push-off is made with the hands and the arm opposite to the back foot is brought forward quickly to make a vigorous "uppercut." A strong push is made with the forward leg and this foot follows the rear foot very quickly and takes a short step forward as the opposite arm is punched forward. The leg action now takes the form of a series of jabbing steps of gradually increasing length until the body reaches the sprinting angle. At first the feet should strike the ground hard to get good contact with it. As the sprinting position is approached the noise should gradually lessen. The arms should perform a series of "uppercuts" and when the body is well up, they should gradually change to the correct arm action, i.e. pull-back. Teachers should note that unless this start is done well it

(Continued on page 61)



HURDLING

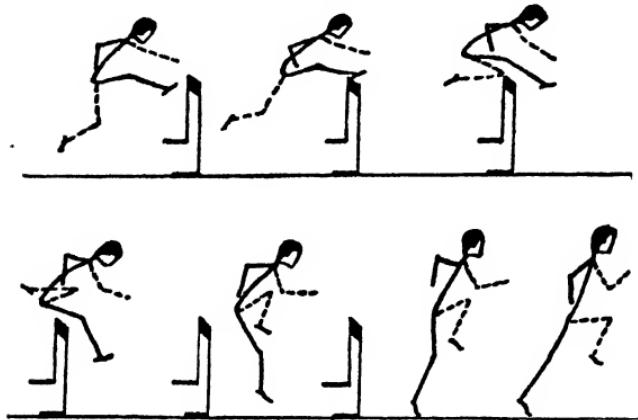
Hurdling may be regarded as sprinting with a series of obstacles in the course, and the underlying technique aims at enabling the athlete to complete the course with little interruption of his running style. Sprinting should, then, form a vital part of the training. The beginner needs to acquire the technique of clearing the hurdle and at the same time master the rhythm of the complete movement. He can be greatly aided in the former if he is supple in the hamstring muscles of the leading leg and in the hip joint of the trailing leg.

PROGRESSIVE STAGES

1. (*St., Lead. Lg. Backward*) Swing the Lead. Lg. forward and 3 walking steps on the spot. + with high Knee lifting.

NOTES

has no advantage over the standing start. The commonest fault is to spring up first and then run forward. Introduce by taking the first step forward only. Then two steps, then three steps and run on spot. Then take in waves of teams, running the length of the gym, returning with easy running. Allow the pupils to use an artificial "back wall" formed by the outside border of their partner's foot. The partner then checks the amount of push which the runner makes with his rear leg.



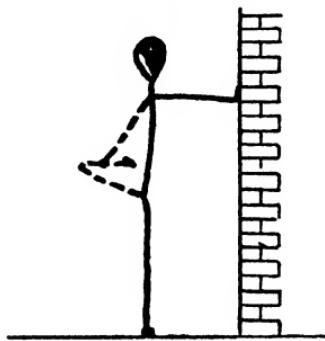
NOTES

The knee should lead the leg swing and it should straighten as it reaches hip height. Pay no attention to the arms. (Count: Go! . . . Over; 1, 2, 3, over; 1, 2, 3, etc.)

PROGRESSIVE STAGES

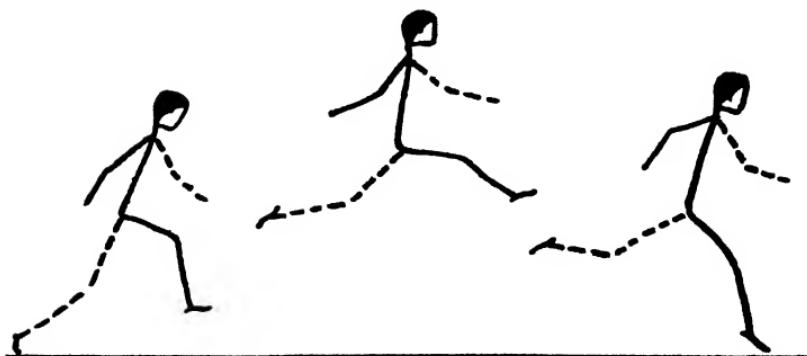
2. (*Side St., One Arm Sideways Support at Wall or Shoulder Support (:), Grasping Shin of Trail. Lg.)* Leg lifting. + Knee circling forward.

Hurdling Stage 2.



3. (*St., Arms Sprint. Posn.)* Arm action. + with Body dip.

Hurdling Stage 4.



4. (*St., Lead. Lg. Backward*) Running with a bound on every 4th count.

NOTES

Knee lifting helps to loosen the hip-joint. Knee circling does the same and also teaches the movement of this leg in clearing the hurdle. Lift the leg high as the knee moves forward.

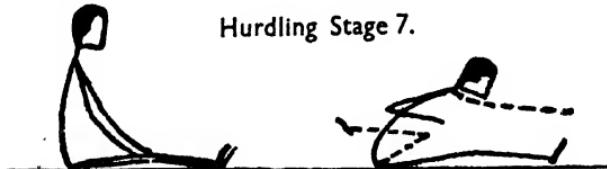
On Go! the opposite arm to the leading leg is extended forward. In the body dip the trunk is bent forward from the hip and the head kept up. Count: Go! . . . Over, 1, 2, 3, etc.

Introduce as low bounds, increasing to high bounds after much practice. Count: Go! . . . Over, 1, 2, 3, etc.

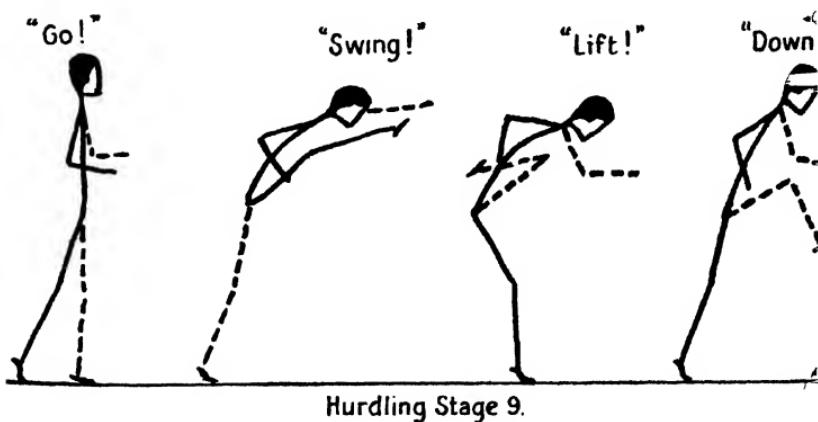
PROGRESSIVE STAGES

5. (St., Trail. Lg. Backward, One Arm Sideways Support at Wall, or Shoulder Support (:)) Grasp the Shin and lift the Knee sideways as high as possible; then move the Leg forward-upward and stretch it to the Foot Forward Posn. Return to the starting posn. and repeat. + perform without holding the Shin.
6. (St., Lead. Lg. Backward, Arms Sprint. Posn.) Lead. Lg. action and 3 walking steps on the spot with Arm action and Body dip. + moving forward.
7. (Horizontal Sitting) Change to Hurdle Sitting Posn.

Hurdling Stage 7.



8. (St., Lead. Lg. Backward, Arms Sprint. Posn.) Running with Lead. Lg. action, Arm action and Body dip.
9. (St., Lead. Lg. Backward) Step forward with the Lead. Lg. with Arm action and Body dip, immediately followed by Trail. Lg. and Arm action.



NOTES

Encourage a slight lean forward of the trunk as the knee is lifted. Lift the knee as high as possible as it moves forward in front of the body. Do not hurry the movement and perform it smoothly. When well practised it should be done quickly.

Same count as in Stage 2.

The position is that shown when over the hurdle. The leading leg should be straight; trailing leg at right angles to the body and with a right angle at the knee; one arm in the sprinting position and the other extended forward. The trunk should lean well forward and the head held up. Hold for a second or two only.

Pay no attention to the trailing leg and keep the head up. Count: Go! . . . Over, etc. This may be taken over parallel benches.

Take slowly at first, then later quicken a little. Count: Go! . . . Swing, lift, down; swing, lift, etc.

PROGRESSIVE STAGES

10. (*St., Trail. Lg. Backward*) One step forward and step over the cane with a swing of the Lead. Lg., followed by Trail. Lg. action (: :). + with Arm action and Body dip.
11. (*Lead. Lg. Backward*) A very small bound forward and then 3 strides and hurdle a low cane (: :).
12. Hurdling one 2 feet 6 inches hurdle or with men one 3-foot hurdle.
13. Crouch start, steps up to hurdle and clear the same.
14. Crouch start and hurdle two hurdles.

NOTES

The performer should stand just far enough back from the cane to enable him to take one step forward and then step over the cane. One of the four should kneel on one knee and hold the cane on the other knee. Another does the movement and the one immediately behind him criticizes. Work across the hall as a class activity.

Use the same organization as in Stage 10 except that the canes are held further away. Much practice at this stage is required. Count: Go! . . . Over, 1, 2, 3, over.

Mark the take-off line about 5 to 6 feet in front of the hurdle and a landing line about 3 to 4 feet behind the hurdle. The level of the head should be the same when clearing the hurdle as when running to it. Try to skim the top of the hurdle with as little clearance as possible. Work with the aid of a partner who should watch for the points mentioned.

The crouch start is made 15 yards back from the hurdle. Each pupil should discover by trial and error the exact number of strides he requires to reach the first hurdle. He should then have much practice starting, running to and clearing the one hurdle. If necessary, the rear leg is changed in the start to ensure that the jumping-foot is forward on reaching the hurdle.

There should be a run-up of 15 yards. In the case of juniors allow $7\frac{1}{2}$ yards to the next hurdle and with seniors allow 9 yards and with men allow 10 yards. (See recommendations on next page.) There should be a definite number of strides to the first hurdle and then three steps to the following hurdle.

In taking the hurdle, the leading leg should straighten out but the knee should not be locked. It should be swung vigorously forward from the hip and at the same time the trunk should lean forward. In good hurdling this body dip is most apparent and often the head is seen to be lower when crossing the hurdles than when running between them. The straightening of the leading leg, the body dip, and the extending of the opposite arm working together, all force the leading leg to the ground. The arm can help even further by swinging downwards as the leading foot is brought to the ground. The trailing leg in the meantime, is lifted with bent knee until it is at right angles to the trunk and, when the leading leg is descending, the former is snapped forward with the knee well up along the directional line of the race. It should then be brought down a good stride forward in front of the leading foot and the sprinting position quickly regained. The other arm should retain its normal sprinting style during the action of clearing the hurdle and by lifting the elbow slightly it can help to maintain the balance of the body and keep it square to the front. The head should be held up and the eyes fixed on the top of the next hurdle immediately one has been cleared.

Continuous practice over all the hurdles and continuous racing over the whole distance are most unlikely to produce good style. The teacher should therefore limit the number of hurdles to two and impress upon his pupils the importance of perfecting their style.

The following distances and heights of hurdles are strongly recommended:

<i>Age</i>	<i>Total distance</i>	<i>Size of hurdles</i>	<i>Number of flights</i>	<i>Approach</i>	<i>Distance between</i>	<i>Finish</i>
11-15 years	75 yd.	2' 6"	7	15	2 $\frac{1}{2}$	15
15-17 years	110 yd.	3'	10	15	9	14
17-19 years	120 yd.	3' 3"	10	15	10	15
Over 19 years	120 yd.	3' 6"	10	15	10	15
Over 19 years	440 yd.	3'	10	49 $\frac{1}{4}$	38 $\frac{1}{2}$	46 $\frac{1}{4}$

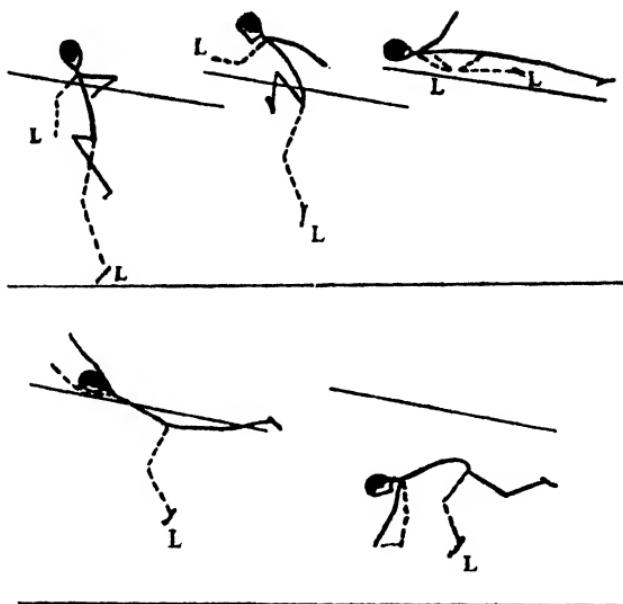
RUNNING HIGH JUMP (WESTERN ROLL)

Briefly this is a jump off the foot *nearest* to the bar, a lie-out along the bar, and a slight turn to land on the *take-off* foot. Its advantages over the "Scissors" style are: (1) It is more economical owing to the lie-out along the bar, and (2) In the approach run the jumper can take off closer to the bar. This is made possible because of his approach which is from the same side as the jumping leg.

The decided advantages of this style, combined with the fact that its fundamental stages are comparatively easy to teach, make it a very desirable style for teaching to boys in Secondary schools, as well as to youths and men.

PROGRESSIVE STAGES

1. (St.) Short run and hop off J. Lg. + over a cane (:).
2. Running High Hop approaching rope at right angles.
(Jumping Stands and Mat.)
3. Running High Hop with a 45° approach run from the same side as the J. Lg. (Jumping Stands and Mat.)



NOTES

Take short, springy steps with increasing speed. Land with the N.-J. Ft. off the ground. Take in open order formation.

This may also be taken as a class activity. Only a short run is required.

It is most important that the pupil approaches from the same side as his J. Ft., i.e. from the left if he is a left-footed jumper. His run-up then would be from the opposite side to that which he would use in the "Scissors" style. It will be seen that the take-off is from the foot near the bar. Considerable height can be cleared with only this amount of technique. Much practice is needed here to lay a sound foundation for the jump proper. Only a short run of a few steps is required.

PROGRESSIVE STAGES

4. (St., J. Lg. Backward) Step forward on to the J. Ft. with the N.-J. Lg. swinging sideways in the take-off action.
+ with a little spring into the air.
5. (St., J. Lg. Backward) Step obliquely forward on to J. Ft. and spring off, swinging the N.-J. Lg. sideways. Bring up the J. Lg. to beat the ankle against the Knee of N.-J. Lg. and land on the J. Ft., with the other Leg in the air, facing the take-off.
6. (St., N.-J. Lg. Sideways and Slightly Forward, Foot held by Partner (:)) Jump off the J. Lg. and bring it up with bent Knee against the other Leg, turn and land on the J. Lg. + land on the J. Lg. in a Semi-Front Support position with the N.-J. Leg raised. + with Arm action.
+ (.).
7. Running high jump over a rope, trying to get a lie-out.
(A good mat is essential. Jumping Stands and Rope.)
+ jumping into a sand-pit.

Stage 6.



8. Practice of the "Lie-out" position.

NOTES

The heel of the J. Ft. should be placed down first and the weight of the body rolled forward in a rocking movement on to the ball of the foot, then on to the tip-toes. When this is well mastered, encourage a little spring off the J. Ft. (See Illustration on page 77.)

Introduce this as a little spring off the J. Lg. to beat it against the N.-J. Lg. As proficiency is gained encourage higher springs, as well as the movement described opposite. This teaches the performer to bring up quickly the J. Lg. after he has taken off. The turn is made to the same side as the take-off leg.

The supporter should hold his partner's leg at approximately the height of his own knees. Great care must be taken to ensure that the supporter does not lift the jumper's foot as he springs. He can help the performer during the spring by gently turning his foot towards the take-off leg. The arm action should be added later to assist the spring. As the J. Lg. comes up both arms should swing obliquely forward.

Start with the rope about hip-height, then gradually raise it as proficiency and confidence are gained. To encourage the performers to straighten the Lead. Leg, urge them "to try to kick" the far upright. The full lie-out should be encouraged only when a sand-pit is available, and when reasonable heights are attempted. To ensure complete safety a well dug sand-pit should be used.

The pupils lie on their sides with the J. Lg. bent underneath the body. The ankle of this leg should be under the knee of the N.-J. Lg. The head should be turned sideways towards the shoulder of J. Lg.

The approach run is made at an angle of about 45° and with a total run-up for boys of about 25-30 feet and for men about 35-40 feet. Standing with his feet together and facing his run-up, the athlete rises on to his toes and, stepping off with the usual foot, approaches the bar with easy springy steps. As he does so he watches his take-off mark (boys $2\frac{1}{2}$ -3 feet, men 3-3 $\frac{1}{2}$ feet from the line below bar), but once he reaches it he lifts his head to look at the lath. The run-up should be cumulative and so practised that he can automatically hit the take-off mark with his J. Ft. each time he jumps.

From a slightly crouching position the N.-J. Lg. is vigorously swung sideways and upward from the hip. Towards the end of this swing the opposite arm (i.e. same as J. Lg.) is swung obliquely forward and upward and to the left across the bar. This swing should not be started too early or it might cause the jumper to clear the bar head and shoulders first. This would be disqualified as a no-jump. Simultaneously a very powerful spring is made off the J. Ft. and the opposite arm is swung vigorously forward.

In the flight, the J. Lg. is lifted very quickly and with bent knee, is tucked under the N.-J. Lg. as the latter is stretched along the bar. The foot of the N.-J. Lg. is turned inwards and downwards at the same time as the under hip clears the bar. The head is turned quickly towards the pit, the shoulders are pressed back and the J. Lg. is extended. All these movements together force the body round and help the underneath hip to clear the bar. This in effect is the "roll."

The landing is made face downwards on to the J. Lg. and hands, the latter helping to break the fall.

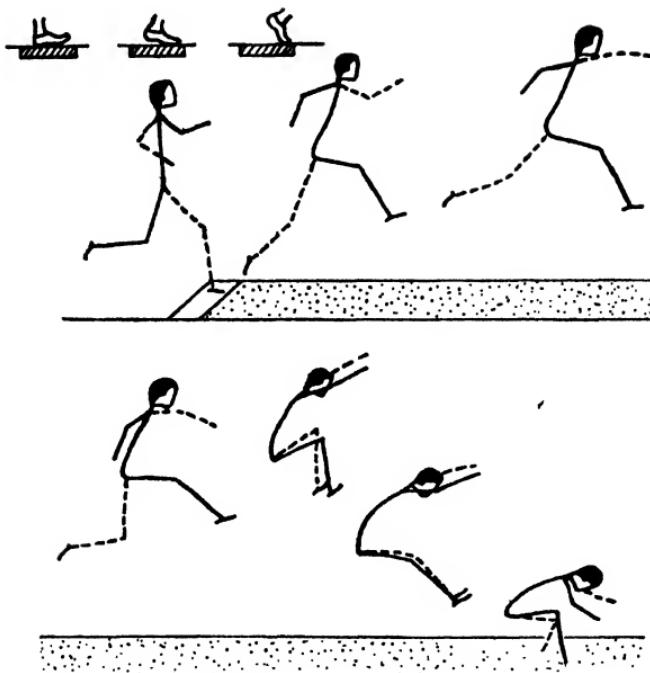
RUNNING LONG JUMP

Skill in long jumping consists of a good fast run-up, a proper take-off, and a high jump forward into the air. It is a comparatively simple activity providing a reasonable amount of attention is paid to the run-up and the take-off. The performer must be so confident that his take-off will be correct that he is able to concentrate all his attention on and direct all his energy to the actual jump itself. In competition a no-jump should occur very rarely. Now as speed in the run-up is of so great importance it naturally follows that sprinting should form part of the training. As in many other athletic activities, considerable strength of abdominal muscles is required. More often than not this group of muscles is deplorably weak. Exercises for developing them may quite well form part of the training.

PROGRESSIVE STAGES

1. (*St., J. Ft. Raised Forward Slightly*) Step on to J. Ft., swing the rear Leg forward with the Knee up, and spring into the air.

The take off.



NOTES

The knee should be slightly bent and the heel of the foot should touch the floor first. The body-weight should be rolled forward in a rocking movement on to the ball of the foot, then on to the tip-toes. At the same time the rear leg should swing vigorously forward with the knee well up. The movement can be done rhythmically and continuously. The spring into the air should be added when the movement is well mastered.

PROGRESSIVE STAGES

2. (St., J. Lg. Backward) Step forward on to J. Ft. and jump forward, lifting first the rear Knee and then the Knee of the J. Lg. to beat them together on to the Chest. + with opposite Arm punching forward-upward.
3. (Across Sitting, Alternately on Opposite Sides of Bench, Knees Raised, Arms Forward-Upward) Standing up by stretching the Knees and swinging the Arms forward-downward.
4. (St. Start for Run.) Run and take-off practice. (Mats.)

Standing Start for Running.



5. (St. Start for Run.) Running Long Jump. (Mats.) (Mat steadiers required.)
6. (St. Start for Run.) Running Long and High Jump over a rope.

NOTES

Encourage a good spring and a firm take-off with the J. Lg. The knees should be lifted high and the body should lean forward into the movement. Later the opposite arm to the N.-J. Lg. is punched forward and upward as the knee of this leg is lifted. The other arm follows with a vigorous swing so that both arms are forward and upward when the knees are on the chest.

This teaches the movement of the legs and arms during the landing. The straightening of the knees adds considerable distance to the jump.

In waves of fours. Take up the standing start position, then run forward with steps gradually increasing in rapidity. The amount of progression forward should be determined by the available space, but after a series of "pattering" steps a good take-off and *high* jump into the air should be made.

Encourage good height. This can be taken as a class activity in waves of four or as a group practice. The mats should be placed with the corner towards the take-off and each mat held steady by two performers. A take-off board should be marked in chalk on the floor. This may also be taken as a high jump, i.e. over a high rope.

This should be introduced as a simple "Fence and Ditch" jump, but later it should be taken as a more mature long jump. The rope should be placed in the middle of the proposed long jump and a definite height fixed.

PROGRESSIVE STAGES

7. (*St. Start for Run.*) To discover each individual's length of run-up. (Playground or games field.)
8. (*St. Start for Run.*) Running Long Jump into a sand-pit.

The approach run should begin with easy running steps and gradually increase speed until on reaching the check-mark the jumper should be travelling fast. He should then concentrate on his take-off and run the last few steps on his speed (*cf. free-wheeling*). The last two steps should be rather short and the J. Ft. should strike the take-off board with considerable noise.

In the take-off, the body weight is transferred on to the ball of the J. Ft. in a rocking movement, while the other leg is moved forward and upward. The J. Lg. is vigorously extended so that the body is shot upward and forward at an angle of about 45° . The arms help considerably in this lifting movement and the jumper is seen to leave the board in a more or less exaggerated running position.

The J. Lg. should be trailed until the jumper reaches his maximum height when it is quickly brought up and both knees are lifted up to the chest. This "knees-up" position is held until the forward momentum is expended, when the knees are straightened and the arms are thrust forward to force the body-weight forward and over the feet. This reaching forward with the arms prevents the jumper from sitting back as he lands.

NOTES

The run-up naturally varies with individuals but generally speaking it should be about 80-100 feet away from the take-off board. The performer takes up a standing start and runs forward, gradually increasing his speed. Then at a point which he feels suitable he makes a spring. His partner is watching carefully and marks the spot where the J. Ft. leaves the ground. This is repeated until the approximate spot is discovered. He paces this out and then records it until he has an opportunity of trying it out on the run-up to the sand-pit. If, when he does so, he takes off too far back from the board or too far forward in front of it, then he moves his starting point the required distance forward or back. This is repeated many times, and the final distance measured with a tape measure and recorded for future use. A check mark, for hitting with the J. Ft., is decided upon later (about 24 feet from the take-off board).

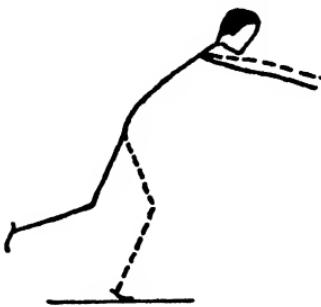
HOP, STEP, AND JUMP

This may be taken from a standing start or with a run. Whilst the former is more useful for indoor work, the latter is the generally accepted method in athletic competition. As in running long jump, speed in the approach run is extremely important and great care should be taken to take-off correctly. Opinion varies as to the relative length of the hop, the step, and the jump. Some authorities say that the jump should be the main source of gaining distance and others say that the hop and the jump should be the same. Here are three approximate ratios which have been found useful:

PROGRESSIVE STAGES

1. (*St. Start for Jump.*) Long Hops. + Long Strides. + Long Hop and Stride.

Standing Start for Jumping



2. Running Long Hop or Hops. + Running Long Hop and Step.
3. (*St. Start for Jump.*) Hop, Step, and Jump. + High Jump. (In waves of teams across.)

(1) 10 : 7 : 10 (2) 9 : 7 : 11 (3) 7 : 9 : 11.

The first ratio is recommended if the jumper prefers using his jumping foot for the hop and step—thus using this foot twice. On the other hand, if he prefers to make the hop on his non-jumping foot and to reserve his jumping foot for the long jump, then the second ratio is recommended. The third ratio is specially suitable for hop, step, and jump with a standing start. The pupils should not be allowed to leave things to chance, and the teacher should coach his pupils according to some set ratio. If this is not done then the energy generated in the run-up is invariably expended in the hop and the step, and so the jump becomes an anti-climax.

NOTES

The movements should be springy in character and the feet should trip lightly across the floor.

Take as a class activity. Introduce as short, easy movements and when well mastered increase their length. Treat the jump as a high jump, e.g. over a rope. The pupils should coach each other to ensure correct performance.

PROGRESSIVE STAGES

4. (*St. Start for Jump.*) Hop, Step, and Long Jump. + with mats. (The mats should be held steady.)

5. (*St. Start for Run.*) Running Hop, Step, and Jump. (Mats.)

6. (*St. Start for Run.*) Running Hop, Step, and Jump into a sand-pit.

STANDING JUMPS

A. *HIGH (SIDeways AND FORWARD).* B. *LONG*

Although standing jumps are rarely included in the modern sports programme they are nevertheless admirable activities and when they are well taught, and not just practised, they have a wide appeal. They are excellent preparatories for their "big brothers" and are very suitable for indoor work and competition. The preliminary movements of the take-off

(Continued in middle of next page)

PROGRESSIVE STAGES

General Practice

1. (*St., Feet Slightly Apart*) Take-off action of the Feet, viz. rocking forwards and backwards. + with a little spring into the air.

NOTES

Introduce as a class activity in waves of teams and working to a set ratio. Parallel lines for the purpose of guidance should be drawn. The same technique is required in the jump as employed in the Running Long Jump. (See page 76.) This should be taken using a scale plan ratio so that each individual may have the opportunity of practising the activity according to the set ratio. When well mastered it should be taken without this plan.

See notes on page 79, Running Long Jump (Stage 7, page 81) and the footnotes on this event, pages 80 and 81.

are the same in all three activities and when mastered the jumps themselves are easy. The arms play a very important part, for not only do they guide the direction of the jump but they also add considerable impetus to the jump itself. Competition rules state that the performer's feet are not permitted to leave the floor more than once in making any one attempt. Rocking forwards and backwards is allowed.

NOTES

The feet should be only an inch or two apart. The rocking movement is started by rising on to the balls of the feet and then bending the knees and letting the heels sink to the floor. The weight is then transferred forward on to the balls of the feet again, and then on to the tip-toes as the knees are straightened.

PROGRESSIVE STAGES

2. (*St., Feet Slightly Apart*) Complete take-off action, viz. Heel raising with Arm raising forward-upward; Trunk leaning forward with Knee bending and Arm swinging forward-downward-backward; upward jump with Arm swinging vigorously forward-upward. + rhythmically and continuously to 4 counts.

A. HIGH JUMP (Forward)

1. (*St., Feet Slightly Apart*) Take-off action with a high upward jump into the air, lifting the Knees well up on to the Chest. + with movement forward, then over a cane (:).
2. Standing high jump over a rope.

HIGH JUMP (Sideways or Scissors)

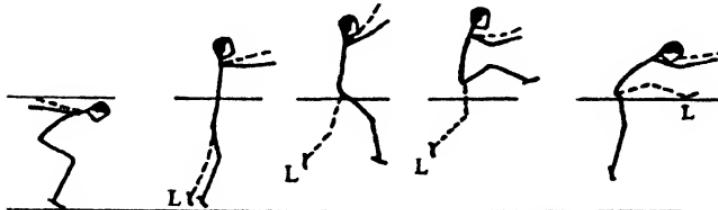
In this jump the performer stands sideways to the bar and about $1\frac{1}{2}$ feet away from it. If he is a left-footed jumper he stands with his right side to the bar and vice versa. He performs the same preliminary movements as in all standing jumps and then springs to the right. Both feet leave the floor at the same time, but the N.-J. Lg. is quickly swung up and over the bar. The J. Lg. hangs downward until the N.-J. Lg. is clear of the bar when it is lifted quickly and a scissor-like action is performed. The landing is made on the N.-J. Lg.

NOTES

This movement should be practised until it is well known. When performed rhythmically, count: Go! . . . Lift, down, *swing*, down; lift, etc.

The knees should be brought up just before the maximum height of the jump is reached.

Care is needed to judge the correct distance of the take-off. It should be sufficient only to allow the free passage of the knees and the feet. This distance also varies with the height jumped.



Standing High Jump

PROGRESSIVE STAGES

1. (St., Feet Slightly Apart) Take-off action with a high upward jump sideways. Swing the N.-J. Lg. only and let the other hang down loosely. Land on the J. Ft. + followed by a swing of the J. Lg. to complete the scissor action.
2. (St. Sideways to Bar, Feet Slightly Apart) High jump sideways over the bar.

B. LONG JUMP

The take-off action is the same as in all standing jumps except that the body should lean forward more. Also the arms should reach well forward in their swing. Thus the body is projected forward and upward into an arched position to show momentarily what is known as the "hang-in-the-air" (see opposite). The knees are then lifted high up to the chest and the arms swung forward-downward. This knee-lift should be delayed until most of the forward momentum is expended when it should be made very quickly. As the body begins to land, the knees are straightened slightly and reach forward again, thus forcing the centre of gravity over the feet.

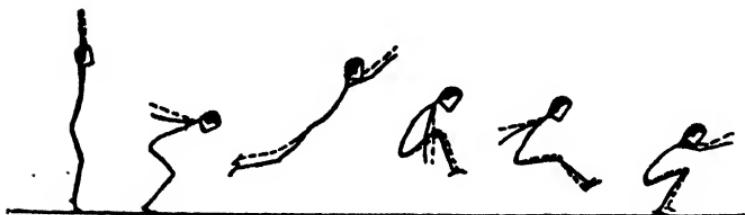
PROGRESSIVE STAGES

1. (St., Feet Slightly Apart) Take-off action with a spring forward and upward.

NOTES

The N.-J. Lg. should be swung up vigorously to a point higher than hip-height. The arms should help the lifting movement by emphasizing the upward part of the swing.

Introduce using canes and working in pairs and then later over a rope or lath. Great heights should not be attempted until the jump over lower heights is well mastered.



Standing Long Jump.

NOTES

The body-weight should be well forward when taking off and emphasis should be laid on the forward part of the arm-swing. Work across in waves of teams.

PROGRESSIVE STAGES

2. The same as Stage 1, trying to get a good "hang-in-the air" and a quick Knee-lift (.) or (:).
3. Standing long jump for distance.

POLE VAULT

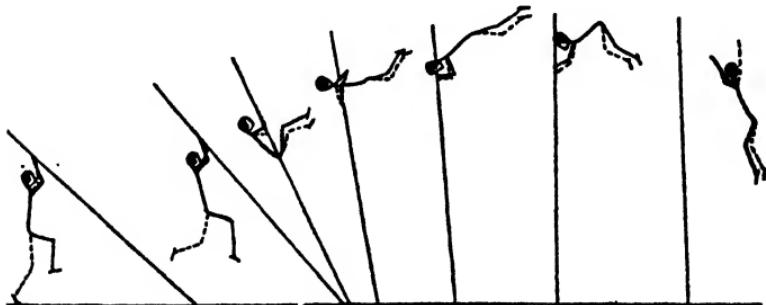
This interesting and spectacular event has a wide appeal. The fact that great heights can be cleared with the aid of a pole provides a thrill which is always an incentive despite the element of danger. The event however can be made quite safe if it is taught in easy progressive stages and if the teacher insists that no one attempts great heights until he has learnt to land with complete safety. A well-dug and deeply filled sand-pit should be available for outdoor practice and only female bamboos should be used. These are much stronger than male bamboos. As the length of the poles varies with the individual and the height jumped, it follows that boys need shorter poles than men. It is important however that the poles should not be so short that performers have to grasp the ends in order to clear the bar. It is also important that the poles should be long enough for the upper ends to counter-balance the lower ends during the approach run. The poles should be bound between their joints with adhesive tape. This ensures a firm grip and at the same time strengthens them and prevents them from splitting.

NOTES

Encourage the performer to "leave" his feet behind and to arch his body in the flight. When working in pairs the partner should watch the performer and offer friendly criticism.

When taken indoors a mat is required to prevent bruising the heels.

Briefly, skill in pole vaulting lies in keeping close to the pole. The vaulter should try to make himself "part of the pole." The more he strays from this ideal the worse will be his vault.



Pole Vault.

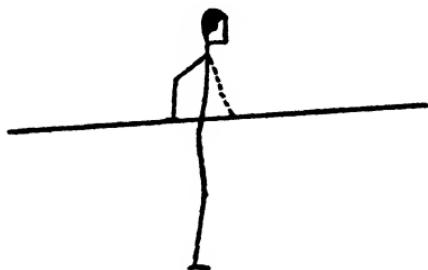
The rule states that the performer's hands must not be moved "in the moment he makes the jump, or after he leaves the ground."

As the pole vaulter requires considerable strength of arms, shoulder, and abdominal muscles, exercises to develop these might well form part of the training.

PROGRESSIVE STAGES

1. (St., In Ranks Facing Wall, J. Lg. Backward, Holding Pole as for Run-up) One step forward on to J. Ft. planting the pole against the base of the wall. At the same time the Knee of the N.-J. Lg. is lifted. + with a little spring.

Standing Holding Pole as for Run-up.



2. (St., Arms Upward Grasping End of Pole, Helper Grasping Lower Third of Pole (:)) Performer runs forward and practises the take-off action and pendulum swing of the Body. + over a low rope. (Mats.)

3. (St., J. Lg. Backward, Arms Upward Grasping Rope) One step forward on to J. Ft., take-off and swing forward and upward. Swing back again and return to the starting place. (Climbing Ropes.)

NOTES

Stand at a convenient distance from the wall. The pole should be held with the base slightly tilted up and close to the side of the body. (Opposite side to the J. Lg.) The near arm, with the elbow upward, should extend backward along the pole and should grasp it with the hand on top and with the thumb pointing away from the body. The other arm should be kept close to the body and the hand should grip the pole with the palm facing downwards. As the pole slides to the wall, the under hand moves to the upper hand. This hand-shift should be made before the pole hits the back wall. At the same time the pole is moved forward into the line of the jump and is pushed upwards until the arms are extended overhead. The exercise should be taken in pairs and the pupils who are watching should be encouraged to offer friendly criticism.

The helper stands close to and on the left side of the pole which is planted firmly on the mat (and on the right side of the pole if the vaulter takes off with his right foot). He grasps the pole with his hands widely separated and with his left hand below his right. His job is to steady the pole and to lever it upward and forward. As the performer moves forward, he slides his hands down the pole to the required height. He should make sure that he swings his body forward into the movement, and that he does not attempt to lift himself. He should keep his body as close to the pole as possible.

Grasp the rope first and then walk back a short distance.
Do not pull with the arms.

PROGRESSIVE STAGES

4. (a) (*Horizontal Sitting, Knees Raised, Arms upward Grasping Rope*) Standing up and turning to face the rope by first pulling and then pushing on it. (Climbing Ropes.)
(b) (*Horizontal Sitting, Knees Raised, Grasping Pole*)
(c) (*Horizontal Sitting, Knees Raised, Grasping Pole, Helper Holding and Fixing Pole (:)*)
5. (*St. in Ranks Facing Wall*) Carriage of the pole and practice of planting it against the base of the wall, followed by the take-off action and a little spring.
6. (*St., N.-J. Lg. Backward, Arms Upward Grasping Rope*) Two steps forward and take-off followed by the body-swing. The Arm pull and turn towards the rope is now added. + add the Arm push. (Climbing Ropes and Mats.)
7. Running vault over a rope. (Jumping Stands and Mats.)

NOTES

The performer sits on the floor, with the rope close to him and on the same side of his body as his J. Lg. The arms, which should be a little forward, should not be fully extended. (b) is another way of doing the same exercise. In this case the performer sits with his back to the wall and with the pole under his arm-pit and the base of it resting against the base of the wall. (c) is still another method of performing this important movement. The helper stands alongside and using his foot to prevent the pole from slipping, holds the pole practically upright whilst the performer does the exercise. In all cases the pull should be a steady one and he should keep close to the pole.

The movement should be performed in pairs and the onlooker should help his partner by criticizing his effort.

This is an extension of Stage 3. The performer needs to stand well back and just before he reaches the highest point of his body-swing he should make a steady pull with his arms, trying to bring his shoulders up to the level of his hands. He then turns towards the rope and lands on the mat facing the run-up. Although it is not advisable for him to release his grasp he should relax his grip and slide his hands down the rope as he lands.

Only a short run is required for great heights should not be attempted. Each group requires two poles. The first pupil vaults as the next one gets ready. The third in order stands alongside to catch the first performer's pole and so on. Home-made and fixed slideways should be used. Preliminary instruction should be now given in how to ascertain the position of the hand-grip on the pole. This is done as follows: the pole is held in a vertical position close to the rope. It is then brought down and the upper hand grips it at the place where it touched the rope. This hand is now moved to a position about 4 or 5 inches higher up the pole.

PROGRESSIVE STAGES

8. Outdoor practice of the run-up, planting the pole in the slideway and vaulting into the sand-pit. + practice vaulting heights.

Having checked the take-off place and where the pole is grasped, the performer stands facing the bar, with the feet together and about 80-90 feet away from it. The pole is held close to the side of the body and with its lower end pointing slightly upward. Stepping off with the same foot each time, he approaches with increasing speed and hits the C.M. with the jumping or take-off foot. This ensures that when he reaches the bar he will take-off the correct distance from it.

A few more steps bring him to the take-off and as the last stride is made the pole is firmly planted in the slide-way. The pole is then brought forward and the under hand slides to the upper hand as the jumping foot heel first strikes the ground. The body leans well forward into the movement and as the jumping leg is fully extended, the non-jumping leg is swung vigorously forward and up with the knee leading. The arms do not pull and the body swings forward and upward like a pendulum.

As the pole reaches the vertical and the legs are high in the air, the arms exert a strong but steady pull and the body turns towards the pole. When the shoulders are about the level of the hands, this pull becomes a push which carries the performer even higher. The arms practically extend as the seat is pushed up and the legs sink towards the pit. These movements which are carried out as the performer clears the bar culminate in a push on the pole which he releases before he begins to fall.

NOTES

The length of the run-up should be about 80 feet and it should be practised carefully to ensure that the performer takes-off the correct distance from the bar. As this take-off distance varies with the height jumped, it follows that each time the performer attempts a greater height the starting place of his run-up should be moved back the required distance. Further instruction should be given in how to ascertain the height of the grip. This is done in the same manner as described in the notes on Stage 7 except that the pole is placed upright in the slideway.

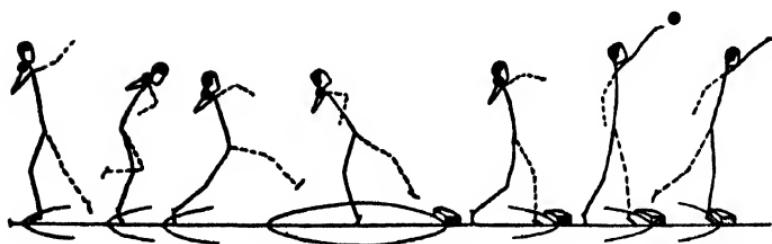
PUTTING AND THROWING

In the throwing activities the movement of the legs, trunk, and arms during the actual put or throw is by far the most important part of the movement. How the performer moves to the throwing position is of minor importance. What does matter is that he arrives at the correct position for starting the movement proper. Opinion varies as to the best method of reaching these throwing positions, e.g. movements across the circle in Putting the Shot, or Throwing the Discus, and the carriage of the Javelin to the final throwing position. It is a matter of individual choice which method to teach; nevertheless it is not wise to coach more than one method. The methods described below are orthodox, and not only have they been thoroughly well tried out but they are known to bear excellent results.

In all throwing and putting movements the performer should stand sideways to the direction of the throw, i.e. on the directional line, and with his feet well separated. Most of the body-weight should be over the back foot with the knee slightly bent. The front knee should be practically straight. Then follows a movement which closely resembles the forward rock of the legs in the golf swing. The right foot (i.e. of rear leg) swivels round on the ball of the foot, the knee is turned in, and the right hip is forced round and up. At the same time the left leg straightens and the body-weight is transferred on to it. This hip rotation is followed by a violent twist of the upper trunk which forces the shoulder of the throwing arm round and along the directional line. The left side of the body is stiffened and it is most important that the left shoulder is kept up. Breaking away to the left is the commonest fault of all, and causes lack of power in the throw. The arm movement completes the throw, but it should not be performed until the right shoulder is well forward.

PUTTING THE SHOT

Beginners invariably are attracted to this event and providing they are not requested to put heavy shots this early interest can be easily maintained. Shots can be obtained in weights of 4, 6, 8, 10, 12, and 16 lb. and the teacher should see that members of his class use weights which are suitable for them. Progression in the weight of shot should be determined by the build of the performer and his stage of advancement. In competition the weight must be put from inside a circle of 7 feet diameter. The performer is not allowed to touch the ground outside the circle and he must leave the circle by the rear. (See A.A.A. rules for further details.) It is suggested that boys up to 17 years be confined to a 6-foot circle.



Putting the Shot.

PROGRESSIVE STAGES

1. (St., Throw. Posn., Hands Clasped Behind) Putting movement using Legs and Trunk only. + rhythmically.

St Throw Posn. Hands Clasped Behind.



2. (St., Throw. Posn., Elbows Level with Chin, Fingers Interlaced) Putting movement. + with right Arm pushing forward.
3. (St., Throw. Posn., Elbows Level with Chin, Holding Medicine Ball) Putting the medicine ball. + with reverse.

NOTES

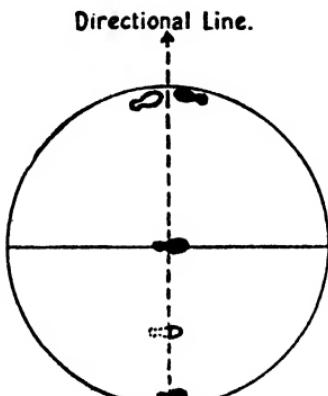
Introduce very slowly and then fuse the movements into one. When taken rhythmically count: Go! . . . back, *forward*, back, *forward*, etc., emphasizing the forward movement. There should be a good forward thrust pushing the body-weight on to the forward leg. The backward movement should be relaxed and the forward thrust finish with the left shoulder well up. The left side of the body should be stiffened and the right shoulder should be over the D.-line.

The forward movement should be performed with vigour and the backward one with a relaxed body. When the arm movement is added it should emerge from the shoulder twist. The palm of the hand should point forward and the whole body and arm should be extended to an angle of about 60° to 70° .

After one or two preliminary rocking movements forward and backward, the medicine ball is pushed forward and up into the air. The left hand should be kept on the ball until the right arm begins its drive. The thighs should be pressed together to prevent the body from falling forward. The "reverse" should be added only when the putting movement is well practised. In this case the back foot is brought forward quickly *after* the medicine ball leaves the hand. This allows a better follow through and at the same time helps the performer to prevent his forward momentum carrying him over the line. If, despite this reverse, he still feels he is going to fall forward, he should lift his rear leg. When making a standing put, the performer should stand about a foot back from the line so as to allow space for his back foot moving forward. The very common fault of reversing during the put must be guarded against.

PROGRESSIVE STAGES

4. (St. Sideways Along D.-line, Left Foot Sideways on Toe, Hands Clasped Behind) Leg movement across the circle.
+ with Arm movements. + with reverse.



Footwork of Putting the Shot

5. Putting the medicine ball (or indoor shot) from a 6- or 7-foot circle.

6. Putting the shot.

NOTES

Introduce this in class formation with the performers standing on lines which are drawn 7 feet apart. (Boys 6 feet apart.) The D.-lines are drawn about 3 feet apart. The pupils stand along the D.-lines and at the point where the back line crosses them. The body-weight should be over the back leg with the toes of the left foot on the ground. The left knee is then bent and carried behind as the body is lowered over the right leg. The left leg is then swung vigorously forward while a hop is made on the right foot halfway along the D.-line. The left foot is placed down a few inches to the left of the D.-line, and the body weight is transferred on to it by a forceful push with the right leg. Introduce "by numbers" and later rhythmically. Count: Go! Swing, hop, *push!* Then later . . . Go! Swing, hop, *push!* . . . reverse!

The centre of gravity of the shot should be over the base of the first and second fingers which should be separated a little. The shot should rest between the collar bone and the neck. It should be held firmly with the arm and shoulder relaxed.

When the performer takes up his position inside the circle and is ready to begin his put, he swings his left leg with bent knee loosely backwards. Then, leaning forward, he swings it vigorously in the direction of the put and at the same time gives a strong push with his right leg. This causes a low glide across the circle. He lands in the centre of the circle with his weight over his right leg and with his trunk turned slightly to the right. The left leg is now forced to the ground and the weight of his body transferred to it. As he performs this last movement the right knee is strongly extended, the right hip is forced round and up, and the left side of his body is completely extended. This is followed by a strong twist of the trunk forcing the right shoulder round and over the D.-line. The left arm helps the twisting movement by swinging forward and round to the left. The right arm then takes up the movement and is extended so that the shot leaves the hand with the palm facing forwards and with the thumb parallel to the ground. The whole body should be completely extended and well under the shot. The delivery merges into the reverse but the change of legs does not take place until the shot has left the hand. When however it does take place the feet are reversed very quickly so that the right foot is brought round and hits the inside edge of the stop-board. The body leans after the shot and the left leg and arm are raised to prevent the performer from losing his balance and falling forward. The movement across the circle should be smooth and should culminate in a powerful forward and upward drive of the whole body.

<i>Age</i>	<i>Weight</i>	<i>Size of circle</i>
11-15 years	... 8 lb.	6'
15-17 years	... 10 lb.	6'

<i>Age</i>		<i>Weight</i>	<i>Size of circle</i>
17-19 years	..	.. 12 lb.	7'
Over 19 years	..	.. 16 lb.	7'

THROWING THE DISCUS

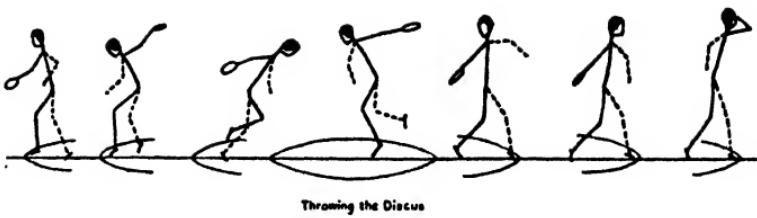
The discus is thrown from a circle of 8 feet $2\frac{1}{2}$ inches diameter and must fall within a 90° sector. It is suggested that boys up to 17 years of age be limited to a circle of 7 feet diameter. The thrower may not leave the circle until the discus has touched the ground and then he must leave by the rear half.

Skill lies in timing the thrust of the hips and the twist of the shoulders (whilst leaving the throwing arm back) so that a forward and upward pull can be exerted on the discus. This is difficult even in the standing throw, as the discus tends to swing forward before any power can be applied. This is even more difficult in the throw with the turn. Difficulty also arises in releasing the discus at the right moment and in so doing making full use of the centrifugal force.

Beginners should start with light discuses so that they may feel the power of achievement from the beginning. Nothing is more discouraging than learning with a full-sized discus. Beginners should also learn the "flat" style before attempting to master the more difficult "wave" style. In the former style the discus gradually rises from the beginning of the turn until it is delivered; in the latter as the thrower moves across the circle the discus is seen to move up and down in waves.

PROGRESSIVE STAGES

1. (St., Throw, Posn., Hands Clasped Behind) Throwing movement using Legs and Trunks only. + rhythmically.



NOTES

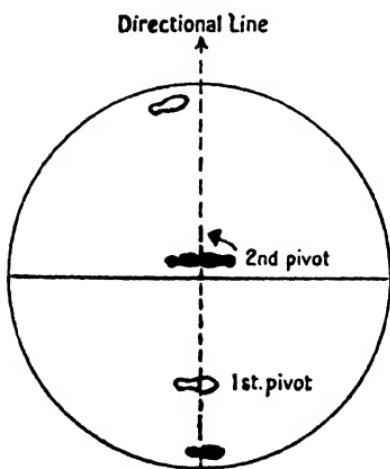
See Stage 1, Putting the Shot.

PROGRESSIVE STAGES

2. (*St., Throw. Posn.*) Throwing movement with Arm movement. + rhythmically. + with discus fastened on to Hand.



3. Out-of-doors: Standing Throws.



Footwork of Throwing the Discus.

NOTES

The body is first twisted to the right with the throwing arm extended and with the palm facing downwards about hip-height. The leg, hip, and shoulder movements are then followed by a forward and upward swing of the arm. As it passes over the D.-line, the elbow bends slightly allowing the hand to cross in front of the face. Emphasis should be laid on the forward swing which should finish with the palm downward. The pupils should think of releasing the discus when the arm is about to cross the D.-line. As always the teacher's count should coincide with this delivery. Count: Go! Back, *swing!* relax, *swing!* etc. The left arm should swing loosely across the body and the shoulder should be kept up.

This is a most important stage and requires careful practice even after the pupils have mastered the turn. The throw is begun with a preliminary swing or two as in the start of the turn, then the whole body is twisted to the front and extended as the throwing arm is swung vigorously forward and up. The thighs are pressed together to prevent the thrower from falling. The left arm aids the movement by swinging to the left as the weight of the body is pushed over to the right and extended under the discus. It is possible in some halls to practise the delivery of the discus by slinging tenniquoits at a high wall.

PROGRESSIVE STAGES

4. (St., *Left Foot Sideways Along D.-line, Hands Clasped Behind*) Steps of the turn (3 counts). + rhythmically.
+ with a discus fastened to the Hand.
5. (St., *Left Foot Sideways Along D.-line*) Preliminary Arm swings. + with complete turn and with Arm movement.
+ with discus fastened to the Hand.
6. Out-of-door work:
(a) Standing throws.
(b) Complete throw with turn.

NOTES

On "One" swivel on the ball of the left foot and take up an astride position on the D.-line facing the other direction. On "Two" swivel on the ball of the right foot and take up an astride position with the left foot to the left of the D.-line and about 12 inches away from it. On "Three" twist the body round to the front and press the thighs together. Keep the legs apart but drive hard off the right leg. Introduce this in class formation with the pupils standing on D.-lines and between lines. For men these should be drawn 8 feet apart and for boys 7 feet apart. Introduce by numbers and then bring in the drop of the left shoulder at the beginning of the turn. The performer then follows this shoulder round and at the same time leans well forward into the movement. When taken on the word "Go" the teacher should count: Go! and, turn, turn, *swing*!

The arm swings should be loose. The first step of the turn must be kept comparatively short and the second step fairly long. The turn should start gently and increase in momentum until the throwing position is gained.

The same care in organization is required as when teaching throwing the javelin. Remember that the discus may fly almost *anywhere!* Keep clear and watch the thrower! Working in pairs is most helpful at all times so that the thrower can receive friendly criticism.

The Hold: The discus should be held with the rim resting against the inner side of the first joint of the fingers. The fingers are open and the thumb is well away from them. The discus should then lie flat against the palm of the hand.

To make the throw with turn, the thrower stands along the D.-line with his left foot sideways and his left shoulder facing the direction of the throw. Starting with an easy swing forward-upward across the body, two loose preliminary swings are made, during which the body-weight is transferred alternately from the left leg to the right. As the discus moves forward the legs and body straighten, but as it swings downward the knees bend slightly and the trunk twists to the right. When the discus reaches the highest point in the last backward swing, the left shoulder is dropped and the body leans forward into the movement across the circle. Then follows the pivot on the left foot and then on the right, bringing the body round into the standing throwing position. The right shoulder leads the arm throughout and a steady pull is exerted on the 'discus. In the "flat" style the hand gradually rises in a spiral-like manner, but in the "wave" style the hand and discus ascend quickly to a point about head-height as the weight is taken in the left-foot pivot. They then descend to about hip-height before travelling on the final swing forward and upward. In both styles the left arm is used to act as a balancer and helps the final twist of the trunk by swinging sideways and round to the left. As the discus moves forward on the final swing the left foot stamps the ground and the body-weight is forced on to the left leg which then straightens. Simultaneously the strong drive off the right leg pushes the hip round and the whole of the left side of the body is braced. The violent shoulder twist to the front is followed by the strong pull and push of the throwing arm. The discus, which leaves the index finger last, is given a rotary clockwise movement. The discus should

not wobble but fly through the air, spinning and flat, at an angle of about 35° . As it leaves the hand the thighs are pressed together and the body, leaning to the right under the throw, is completely extended. If after releasing the discus the thrower feels he is falling forward he changes his legs and completes the reverse so that he finishes with the outside edge of his right foot close to the circle. Care must be taken to make the first step across the circle comparatively short so as to allow a good spread of the legs in the final throwing position. The steps and arm movement should start slowly and gradually increase in speed until the final flick is given to the discus. The whole movement should be smooth and rhythmic. The very common fault of breaking to the left as the throw is made should be carefully avoided.

<i>Age</i>		<i>Weight</i>		
		(lb.)	(kgm.)	<i>Size of circle</i>
11-17 years ..	..	2.75	1.25	7'
17-19 years ..	..	3.3	1.5	8' 2 $\frac{1}{2}$ "
Over 19 years ..	..	4.4	2.0	8' 2 $\frac{1}{2}$ "

THROWING THE JAVELIN

Javelins are made in three sizes—for boys, for youths, and for men. Competition javelins are made from special birch wood and remain rigid in flight. Unfortunately they break easily, even when thrown by experts, and for this reason they are too costly to use for practice purposes. On the other hand even with rough usage the bamboo-shafted javelins last a considerable time. They are much cheaper than the others, and if they split the javelin can easily be mended with adhesive tape. When the bamboo is beyond repair the head can be re-shafted.

The spear must be thrown from behind a line at least 12 feet in length and to be valid the throw must land point first. This line may not be crossed until the spear strikes the ground. Measurement is made perpendicular to the throwing line or line extended.

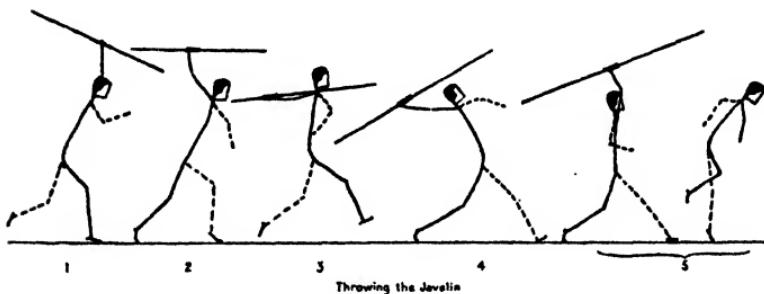
Suppleness of the shoulders and of the trunk both backward and laterally are great assets for the beginner and efforts to promote suppleness in these directions might well form part of the training. Briefly the technique consists of forming a bow with the body and using it to "shoot" the spear from it like an arrow. Whilst strength of throwing arm is important the skill lies in being able to get the weight of the body behind the throw, and to transmit the effort along the shaft of the javelin. Any bi-movement

PROGRESSIVE STAGES

1. (St., Throw. Posn., Hands Clasped Behind) Throwing movement using Legs and Trunk only. + rhythmically.
2. (St., Throw. Posn., Throw. Arm Backward) Throwing movement (:), + (.) and + continuously in slow time.

which deflects its flight must be prevented and considered wasteful. Much of the practice therefore is taken along the straight line known as "the directional line." The thrower should try to check any sideways movement.

Extreme care must be taken at all times to ensure the



safety of the pupils. The teacher must watch carefully his class organization and insist that no one throws a javelin if there is a likelihood of it falling near anyone. When coaching this event as a class activity, the partners should stand behind the throwers and should not retrieve the spear until the word is given. Also pupils should not throw until the word is given and then all must throw simultaneously. When this event is taken as a group practice, a special portion of the sports field should be set aside and one but the throwers allowed in it.

NOTES

See Stage 1, Putting the Shot.

The performer should grasp the 1st and 2nd fingers of his partner's left hand and pull gently. The performer tries to arch his body and to twist his shoulders square to the front

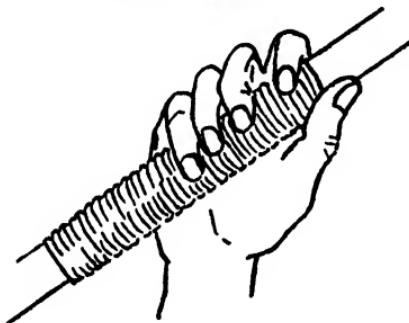
(Continued on page 117)

PROGRESSIVE STAGES

- + with tennis ball. + with football against a wall.
- + with light medicine ball.

3. (St., Throw. Posn., Throw. Arm Backward, Holding Cane or Spear) Throwing movement (:). + (.).

Hold of Javelin.



4. (St., Left Foot Forward Toeing Line (i.e. C.M.), Hands Clasped Behind) Walk steps of transitional stage and throw. (Along D.-lines to 5 counts.) + at a slow run.

NOTES

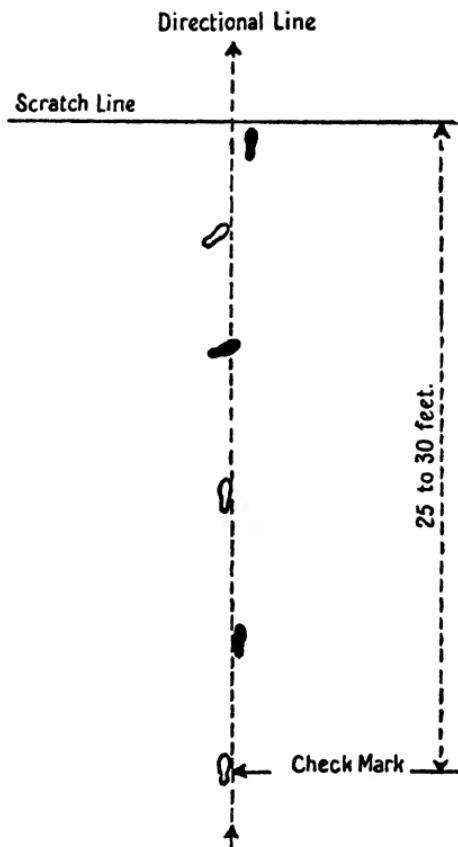
before bringing his arm forward. Later he does this movement unaided and when it is fairly well mastered it should be done continuously and in slow time. In this case the arm should be carried back in a relaxed manner and the forward throw emphasized. The teacher should count: Go! *Pull* and back; *forward* and back, etc.

A series of parallel D.-lines are required here. The partner should hold the end of the spear and keep it over the D.-line. Canes should be held in the middle and if spears are available, they should be held in the following manner: The spear should lie diagonally across the hand with the edge of the binding (near the tail) resting on the base of the index finger. The fingers are loosely closed and the index finger grasps the shaft immediately behind the binding. The javelin should lie along the arm close to and under the chin. Later the movement should be taken without the aid of a partner. He should however stand behind the thrower and offer help in the form of correction. When this practice is taken out-of-doors the spear should be released and it should fall on the D.-line extended. Standing throws require careful practice and should always form part of a javelin thrower's training. The thrower at all times should try to lift the tail of the spear so that it appears to fly parallel with the ground. It should land practically flat.

A line drawn across the D.-lines denotes the C.M. The steps should be introduced by full explanatory command, e.g. on "One," step forward with the right foot on the right

(Continued on page 119)

PROGRESSIVE STAGES



Footwork of Throwing the Javelin.

5. (St., Short Astride, Throw Hand Level with Head) The Arm movement of the throw. Count 1-5. + with canes or spears.

NOTES

side of the line. On "Two," step forward with the left foot on the left side of the line. On "Three," step forward and across to the left side of the line with the right foot ("cross-over step"). On "Four," step to the side with the left foot, about a foot-length to the left of the line. On "Five" step forward on to the right foot and on to the right side of the line. (See diagram opposite.) The teaching should then be continued by number command, by numbers only, and lastly to the word "Go!" The count for this would then be: Go! . . . Right, left, cross, to the side, *throw!*

On "One" the arm goes straight up. "Two" it is carried back. "Three" it sinks to hip-height. "Four" the arm is turned a little so that the spear is uppermost. "Five" the throw is made. When these movements are known they should be linked together to form a smooth, rhythmic whole.

PROGRESSIVE STAGES

6. (*St., Left Foot Forward Toeing C.M., Throw. Hand Level with Head*) Arm and Leg movement combined. + with canes or javelins. + at walking and at running speed.

7. (a) (Outdoors only) Repeat Stage 6, Throwing the Spear.
 (b) (Indoors) (*St., Left Foot on C.M., Throw. Hand Level with Head, Grasping Partner's Fingers of Left Hand*) Walk steps and "throw." + at slow running speed.

8. (*St., Throw. Hand Level with Head, Grasping Cane or Spear*) Stepping off with the right Foot, running with the over-head carriage of the spear.

The work should now be taken entirely out-of-doors and should consist of standing throws as well as the transitional steps and throw. The run-up to the C.M. followed by the transitional steps and throw cannot be practised too frequently. This run-up to the C.M. should be about 35-45 feet, and the distance from the C.M. to the base-line about 25-30 feet.

The thrower takes up his position about 60-75 feet away from the base-line and facing it. His feet are together and he holds the spear over his right shoulder about head-height and with the point slightly down. He then leans forward and steps off with the right foot. He approaches the C.M. with increasing speed and strikes it with his left foot. He then performs a series of bounding strides during which

(Continued on lower half of next page)

NOTES

Introduce in a similar way as in the previous stages but when implements are used care must be taken to see that they are moved directly backward and forward over the D.-line. The partner standing behind the thrower should watch to see that this is done.

Work over the D.-lines and have partners to criticize.

The partner should supply only that amount of resistance which the thrower requires to make a good throw.

The hand should grasp the spear firmly, but the arm should be kept relaxed.

the spear is lifted up and round in a circular backward movement. The "cross-over step" follows and the hand falls close to and about the level of the hip. Throughout the whole of this movement the spear is kept close to the body and directly over the D.-line. The next step, which is the step to the throwing position, is longer than the "cross-over step." It is made to the left of the D.-line and at an angle of about 20° . In the meantime the throwing arm is rotated slightly so that the javelin is uppermost. The right leg, which has taken the weight of the body, now begins the throwing movement. It straightens and the right hip is forced forward, round and up as the body-weight is transferred on to the left leg. The left leg straightens as the shoulders twist violently to the front and as the body arches

into a bow. In the meantime the throwing arm is just beginning to come forward and with the shoulder leading the throw, a strong upward push is made so that the spear is lifted as it is pulled forward and thrust upward into the air. This upward push is most important for it ensures that the tail of the javelin is lifted. The left arm, which has been raised to about shoulder-height, is swung round, down, and back to help the twisting movement. As the spear leaves the hand immediately above the head, the body straightens out in a terrific drive and "follow through." The head is lifted to watch the flight. The weight of the body is carried forward and a step is made on to the right leg to

the right side of the D.-line. The left leg and arm are lifted to help the thrower to retain his balance and to prevent him from crossing the line.

<i>Age</i>	<i>Weight</i> (lb.) (grm.)	<i>Length</i>	
		<i>7' 6$\frac{1}{2}$"</i>	<i>230 cm.</i>
11-17 years	.. 1·32 600		
17-19 years	.. 1·54 700	<i>7' 8$\frac{3}{4}$"</i>	<i>240 cm.</i>
Over 19 years	.. 1·76 800	<i>8' 6"</i>	<i>260 cm.</i>

CHAPTER IV

STANDARD TESTS

If the objective of the athletic training suggested in this book is to be carried out to its logical conclusion then *every* pupil should be provided with a specific and ready means of testing his personal progress as well as his ability and skill.

Standard tests can provide this means and at the same time be a great source of encouragement to all, especially those who are not athletically inclined and in consequence do not take part in competitive athletics. Moreover, these tests encourage all-round physical ability and can do much to off-set early specialization.

The value of standards as an incentive to the "rank and file" has been recognized for some time and several examples of these are given below. Unfortunately, information regarding the percentage of the participants who pass these standards is not always available. Even so, it is clear that this percentage portion varies so considerably that much of the comparative value of these standards is lost. They do, however, form a useful starting point and guide for those who wish to produce tests to suit their own local conditions.

If standards are to be a source of encouragement to all, then there should be more than just one test for each event and age group. Bearing this in mind, the author collected much information on the subject and endeavoured to produce a complete set of tests. But the lack of sufficient usable material defeated this attempt. The basis of the standards varied enormously, not only with regard to age groups but even with regard to the distances run and the weight and

size of apparatus. It soon became evident that before a really comprehensive set of standards could be established on anything like a national basis, the activities themselves would have to be standardized. This the author has done with the indirect help of his friends and associates, and by making inquiries from numerous athletic associations and clubs. He has also taken into careful consideration the excellent recommendations put forward in the revised booklet issued by the Ling Physical Education Association.¹

¹ *Report of the Second Conference on Athletics for School Children, 1939,*
price 1/-

THE SCHOOLS' ATHLETIC ASSOCIATION

A. Boys UNDER 14½ YEARS

Event	School	District	County	Inter-county Meeting	Schools' A.A. Record
Running: 100 Yards ..	13s.	12·6s.	12·25.	11·8s.	10·95.
220 Yards ..	30s.	29s.	28s.	27s.	24·95.
440 Yards ..	74s.	70s.	67s.	65s.	57·65.
880 Yards ..	2m. 4·5s.	2m. 3·6s.	2m. 3·0s.	2m. 2·5s.	2m. 1·3·8s.
Hurdles, 75 Yards (7 flights of 2' 6")	13s.	12·6s.	12·2s.	11·8s.	10·8s.
High Jump ..	4'	4' 2"	4' 5"	4' 8"	5' 2½"
Long Jump ..	13' 6"	14'	14' 8"	15' 6"	19' 2½"

B. Boys UNDER 16½ YEARS

Running: 100 Yards ..	..	..	11·4s.	11·2s.	10·6s.
220 Yards ..	..	..	25·5s.	25s.	23·6s.
440 Yards ..	..	..	60·2s.	57·7s.	54s.
880 Yards ..	..	..	2m. 23s.	2m. 13s.	2m. 11·6s.
Hurdles, 75 Yards (7 flights of 2' 6")	..	..	135.	12·15.	10·6s.
High Jump ..	..	..	4' 9"	4' 10"	5' 2½"
Long Jump ..	..	..	15' 6"	17'	20' 7½"

ATHLETIC ASSOCIATION OF MIDDLESEX SECONDARY SCHOOLS

Event	Under 15 years	Record under 15 years	Over 15 years	Record over 15 years
Running: 100 Yards	..	—	11' 28.	—
220 Yards	..	27' 4s.	24' 4s.	10' 4s.
440 Yards	..	63s.	55' 2s.	23s.
880 Yards	..	2m. 28s.	2m. 10' 4s.	52s.
1 Mile	..	—	—	2m. 4s.
Relay Race (4 x 110 Yards)	..	53' 4s.	50' 4s.	4m. 36' 8s.
Hurdles (110 Yards)	..	—	—	46' 6s.
High Jump	..	4' 4"	5' 2"	14' 6s.
Long Jump	..	15'	18' 8"	5' 6 $\frac{1}{4}$ "
Javelin	..	—	—	17'
Discus	..	—	—	20' 1 $\frac{1}{2}$ "
Shot (12 lb.)	..	—	—	159' 4"
			110'	111' 8 $\frac{1}{4}$ "
			80'	37' 9"
			—	27'

A NEW APPROACH TO ATHLETICS

PUBLIC SCHOOLS

Event	School	Inter-Schools' Meeting Record	
		Meeting	Record
Running: 100 Yards ..	10' 8s.	—	10' 3s.
220 Yards ..	24' 8s.	—	—
440 Yards ..	56s.	54s.	50' 8s.
880 Yards ..	2m. 12s.	2m. 8s.	1m. 59' 28.
1 Mile ..	5m. 5s.	4m. 4s.	4m. 29s.
Hurdles, 120 Yards (3' 3") ..	18' 6s.	—	15' 28s.
High Jump ..	5' 2"	5' 4"	5' 10 $\frac{1}{2}$ "
Long Jump ..	18' 9"	19' 6"	22' 8"
Hop, Step, and Jump ..	35'	—	—
Pole Vault ..	8'	9'	11' 3 $\frac{3}{4}$ "
Javelin (7' 6" and 21' 6 oz.) ..	125'	135'	178' 8 $\frac{1}{4}$ "
Discus (3 lb. 5 oz.) ..	100'	105'	131' 10 $\frac{1}{2}$ "
Shot (12 lb.) ..	34'	36'	48' 0 $\frac{1}{4}$ "

YOUTHS (OVER 16 AND UNDER 19 YEARS)

Event	1st Class Club	Middlesex	Southern	Counties A.A.A.	Counties A.A.A.	A.A.A.	A.A.A. Record
Running: 100 Yards ..	—	—	—	—	—	—	105.
220 Yards ..	25' 6s.	25s.	24s.	23' 8s.	23' 8s.	22' 6s.	22' 6s.
440 Yards ..	58s.	56s.	55s.	53' 6s.	53' 6s.	50' 8s.	50' 8s.
880 Yards ..	2m. 15s.	2m. 10s.	2m. 7s.	2m. 6s.	2m. 6s.	IM. 58' 8s.	IM. 58' 8s.
1 Mile ..	5m. 5s.	5m.	4m. 45s.	4m. 40s.	4m. 25s.	—	—
Hurdles, 120 Yards (3' 3") ..	19s.	18' 6s.	17s.	—	—	15' 3s.	15' 3s.
High Jump ..	4' 11"	5'	5' 3"	5' 5"	5' 5"	5' 11"	5' 11"
Long Jump ..	17' 6"	18' 6"	18' 9"	19' 3"	19' 3"	22' 6 $\frac{1}{4}$ "	22' 6 $\frac{1}{4}$ "
Hop, Step, and Jump ..	?	?	—	—	—	—	—
Pole Vault ..	7'	7' 6"	8' 9"	9'	9'	11' 2 $\frac{1}{4}$ "	11' 2 $\frac{1}{4}$ "
Javelin (7' 6 $\frac{1}{4}$ " and 21' 6 oz.) ..	95'	110'	130'	135'	135'	191 $\frac{1}{2}$ "	191 $\frac{1}{2}$ "
Discus (3 lb. 5 oz.) ..	80'	90'	100'	110'	110'	146' 6 $\frac{1}{4}$ "	146' 6 $\frac{1}{4}$ "
Shot (12 lb.) ..	27'	30'	36'	38'	38'	50' 6"	50' 6"

MEN (OVER 19 YEARS)

Event	1st Class Club (Southgate Harriers)	Middlesex County A.A.A.	Southern Counties A.A.A.	A.A.A.	English Native Record	World Record
Running: 100 Yards	..	—	—	—	9' 88.	9' 48.
220 Yards	24' 4s.	23' 6s.	23s.	22' 4s.	21' 25.	20' 33.
440 Yards	55' 4s.	54s.	52s.	51s.	48s.	46' 3s.
880 Yards	2m. 7s.	2m. 5s.	2m. 1s.	1m. 59s.	1m. 49' 2s.	1m. 49' 2s.
1 Mile	4m. 45s.	4m. 40s.	4m. 30s.	4m. 25s.	4m. 6' 4s.	4m. 1' 4s.
3 Miles	16m.	15m. 35s.	15m. 5s.	14m. 50s.	13m. 53' 25.	13m. 32' 4s.
6 Miles	?	?	32m. 15s.	31m. 30s.	29m. 45s.	28m. 38' 6s.
Hurdles, 120 Yards (3' 6")	18s.	17' 2s.	16' 5s.	15' 8s.	14' 5s.	13' 7s.
440 Yards (3')	64s.	62s.	60s.	58s.	53' 8s.	52' 2s.
High Jump	5' 3"	5' 4"	5' 7"	5' 10"	6' 5"	6' 11"
Long Jump	19'	20'	21' 3"	22'	24' 2 1/2"	26' 8 1/4"
Hop, Step, and Jump	36'	38'	40' 6"	43'	47' 4"	52' 5 1/2"
Pole Vault	8' 6"	9' 3"	10' 6"	11' 3"	12' 9 1/2"	15' 7 1/2"
Javelin (800 grm.)	105'	125'	150'	175'	203' 3"	258' 2 1/2"
Discus (2 kgm.)	90'	95'	115'	125'	142' 10 1/2"	180' 2 1/2"
Shot (16 lb.)	31'	32'	37'	41'	47' 8 1/2"	57' 1"
Hammer (16 lb.)	?	?	110'	130'	172' 0 1/2"	193' 6 1/2"

STANDARD TESTS

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The following are the tests used by the Army School of Physical Training, Aldershot. (It will be noticed that these standards have been produced on a much different basis from those above.)

Marks	I. AGILITY			II. STRENGTH			III. CO-ORDINATION			IV. SPEED ENDURANCE		
	(1) Long Jump	(2) High Jump	(3) Hop, Step, and Jump	(4) Shot	(5) Hammer	(6) Javelin	(7) Discus	(8) Pole Vault	(9) 100 Yards	(10) One Mile	(11) mins. sec.	
10	17	3	4	8	36	0	90	0	130	0	8	10
9	16	6	4	6	34	6	29	0	120	0	8	6
8	16	0	4	4	33	6	27	0	110	0	8	0
7	15	0	4	2	31	6	25	0	100	0	7	6
6	14	3	4	0	30	0	23	0	55	0	6	5
5	13	6	3	10	28	6	21	0	45	0	60	0
4	12	6	3	8	27	0	18	6	35	0	52	0
3	11	6	3	6	25	0	16	0	25	0	45	0
2	11	0	3	3	24	0	14	0	20	0	45	0
1	10	0	3	0	21	0	11	6	10	0	33	0

Notes

For the performance part of the Standard Athletics qualification, one event in each of the five groups must be taken.

In Group III, any event in Group I and II not already taken in their own groups may be substituted. Fifty per cent must be obtained to qualify.



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